

OptiMat T

➤ Molded Case Circuit Breakers for currents from 1.5 to 630 A

The contemporary OptiMat T series of molded case circuit breakers for rated currents from 1.5 to 630 A includes 5 standard sizes in 3-pole and 4-pole designs:

- OptiMat T125 for rated currents from 1.5 to 125 A;
- OptiMat T160 for rated currents from 125 to 160 A;
- OptiMat T250 for rated currents from 32 to 250 A;
- OptiMat T400 for rated currents from 100 to 400 A;
- OptiMat T630 for rated currents from 400 to 630 A.

Wide range of breaking capacities from 50 kA to 200 kA at 400VAC.

The OptiMat T series includes versions of circuit breakers with thermomagnetic and electromagnetic protection releases, as well as electronic protection releases with breaking capacities of up to 200 kA.

Functional and advanced protection releases provide a full range of protection functions, as well as the ability to measure network, display and transmit data parameters via the Modbus RTU protocol.

The series is supplemented by versions of circuit breakers with protection against earth leakage currents, circuit breaker for use at voltages up to 1000 V AC, and switch-disconnectors.

Due to a wide range of optional accessories, OptiMat T circuit breaker provide solutions for automatic control, signaling and monitoring, safe and convenient operation, and ease of installation. Accessories are supplied separately and can be easily installed by the user.

The OptiMat T series provides modern and efficient solutions for various industrial segments and applications.



► Series advantages

Design features

- Compact overall dimensions
- High performance
- Modular design

5 standard sizes

125 A	160 A	250 A	400 A	630 A
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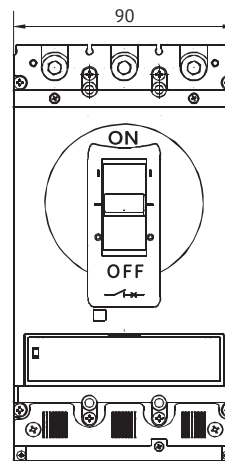
OptiMat T125-T630 rated currents: 1.5 ~ 630 A.
Versions: with leakage current protection, switch-disconnectors, versions up to 1000VAC.

- Universal sizes for use with thermomagnetic and electronic protection releases
- Modular design for easy installation of accessories

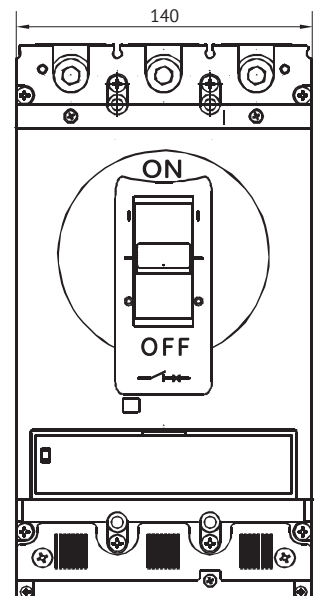


The Modbus RTU communication module is integrated into the protection release and does not require connection of external devices.

Compact sizes 125 A and 160 A in one overall size. The width is 90 mm only



Compact sizes 400 A and 630 A in one overall size. The width is 140 mm only



Full selectivity and high breaking capacity

OptiMat T features a double break design that provides high breaking capacity and high current withstand capability at operating voltages up to 690VAC and 1000VAC, as well as high current-limiting properties that reduce dynamic impacts on the electrical plant.

Efficient limitation of the let-through energy during short circuits (I^2t) ensures a reduction in the thermal impact on electrical plant components and conductors.

The short-circuit current limitation during disconnection allows the coordination of devices in terms of selectivity and backup protection.

The optional ZSI zone selectivity module for OptiMat T400-T630 enables coordination of protection in the most challenging situations.

Complete selectivity between OptiMat T circuit breaker is ensured by the energy type of selectivity due to prominent current-limiting properties.

Breaking capacity for the entire series up to:
Icu=200 kA/ 400VAC
Ics= 150 kA/ 400VAC

The 690VAC breaking capacity reaches 80 kA for rated currents from 32 to 630 A.

Suitable for various operating conditions

The design of OptiMat T allows the breakers to be used in a variety of conditions:

- Operating temperature of circuit breakers with thermomagnetic and electronic releases ETN/ETN-M from -40 to +70 °C
- Operating temperature of breakers with electronic releases ETA/ETE from -25 to +70 °C
- Temperature of breakers storage up to -40 °C
- Operation at humidity up to 95%
- Operation at altitudes up to 5000 m above sea level
- Resistance to vibrations with a frequency in the range from 2 to 13.2 Hz with an amplitude of 1 mm and in the range from 13.2 to 100 Hz with a constant acceleration of 0.7 g
- The devices have been tested for use in hot, dry climates and using salt spray units

Freedom of installation and connection of breaker in the LV-switchboard

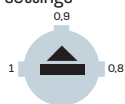
The design of OptiMat T allows for convenient and versatile installation inside the LV-switchboard, as well as for power supply connection:

- OptiMat T breaker can be installed in vertical, horizontal or recumbent positions
- OptiMat T breaker of L, M, H and S versions allow power supply to be connected to both the upper and lower terminals without reducing the characteristics to AC 690 V. For V and R versions at AC 690 V, when power is connected to the lower terminals, the breaking capacity is reduced by half.

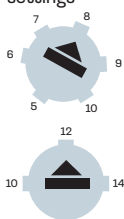
Standard functionality for different applications and advanced features

OptiMat T125-T630 circuit breakers with thermomagnetic protection releases

Overload protection settings



Short circuit protection settings



Power distribution version

Engine protection version

OptiMat T125-T630 circuit breakers with electronic protection releases

Wide range of protections for energy distribution:

- Overload protection
- Selective short circuit protection
- Instantaneous short circuit protection
- Earth-fault protection
- Neutral protection

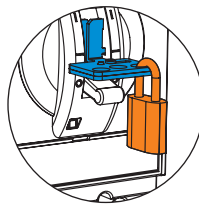
A range of different types of releases is available, depending on the required set of protection functions. Versions of protection releases with data transmission function for integration into control and monitoring systems are also available.

Comprehensive electric motor protection

The «-M» version protection releases provide comprehensive protection for electric motors:

- Overload protection
- Rotor jamming protection
- Instantaneous short circuit protection
- Earth-fault protection
- Protection against phase imbalance/breakage
- Delayed start protection
- Undercurrent protection

Operational safety



- Locking the switch status with a padlock
- Cover for protection release settings

Expandable functionality

The capabilities of OptiMat protection releases can be expanded by using additional electronic modules:

Zone selectivity module ZSI



Contactorm control module

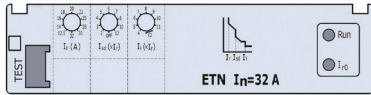


Intelligent releases. Communication and control

OptiMat T circuit breakers comply with the contemporary requirements for digital data transmission, dispatching and control, due to the intelligent ETA-COM and ETE releases with an integrated Modbus RTU communication module.

The optional external ET HMI display for OptiMat T enables convenient display, reading and setting of parameters and control from the panel door.

ETN / ETN-M



- Basic security features

ETA / ETA-COM ETA-M / ETA-M-COM



- Wide range of functions
- Engine protection version
- Current measurement
- Trigger log
- Data transmission

ETE / ETE-M



- Maximum set of functions
- Comprehensive engine protection
- Measuring network parameters
- Trigger log
- Data transmission
- Display
- High accuracy of network parameter measurement and remote control

High reliability and safety of operation

Double insulation: OptiMat T circuit breakers provide double insulation between live parts, the circuit breaker housing and controls. The installation places for accessories are also fully insulated, ensuring maximum safety during operation.

Insulation distances and isolation suitability comply with IEC and COST standards.

The control lever always clearly indicates the position of the moving contacts of the circuit breaker.

The enclosure protection rating is IP20 and can be increased to IP40 by installing power terminal covers.

Standard sizes T125 / T160 / T250

Mechanical durability/20,000 cycles
Electrical durability/10,000 cycles

Standard sizes T400/T600

Mechanical durability/15,000 cycles
Electrical durability/7500 cycles

Leakage protection solutions for maximum safety

OptiMat T125-T630 of the «RCA» version provide a solution for protecting electrical installations from earth leakage currents.

Possibility of installing internal and external electrical and mechanical accessories for OptiMat T.

Reliability and safety of operation due to the built-in test function.

The leakage current protection unit is available in the version with display and data transmission.

Selective triggering at leakage currents from 50 mA to 3 A.

Solutions up to 800VAC; 1000VAC

3 standard sizes

250 A 400 A 630 A

Rated currents of OptiMat T250-T400-T630 version «HV»:
from 32 to 630 A for use in solar power and transport installations.

Three compact sizes up to 630 A with thermomagnetic protection releases.

Breaking capacity versions:

- up to 50 kA at 800VAC
- up to 15 kA at 1000VAC

Equipped with standard electrical and mechanical accessories for signaling, control and protection.

Disconnection solution: Switch-disconnector

4 standard sizes

125 A 250 A 400 A 630 A

Nominal currents of OptiMat T125-T250-T400-T630 version «SD»:
with rated currents up to 630 A

Suitable for AC up to 690VAC and DC up to 1000VDC.

High withstand current values.

Equipped with standard electrical and mechanical accessories for signaling, control and protection.

OptiMat T circuit breakers with thermomagnetic and electronic releases

► Selection guide

Standard size		T125				T160				T250					T400					T630													
Rated body current Inm, A		125				160				250					400					630													
Number of poles		3, 4				3, 4				3, 4					3, 4					3, 4													
Rated current In, A		1.5 ¹⁾ , 2.5 ¹⁾ , 6 ¹⁾ , 10 ¹⁾ , 16, 20, 25, 32, 40, 50, 63, 80, 100, 125				125, 160				125, 160, 180, 200, 250					32, 40, 50, 63, 80, 100, 125, 160, 200, 250					100, 250, 315, 400					400, 500, 630								
Design		Stationary, plug-in				Stationary, plug-in				Stationary, plug-in					Stationary, plug-in, withdrawable					Stationary, plug-in, withdrawable													
Rated insulation voltage Ui, V		800				800				1000					1000					1000													
Rated impulse withstand voltage Uimp, kV		8				8				8					8					8													
Rated operating voltage Ue (V) 50/60 Hz		AC400/AC440/AC500/AC690				AC400/AC440/AC500/AC690				AC400/AC440/AC500/AC690					AC400/AC440/AC500/AC690					AC400/AC440/AC500/AC690													
Arc gap between breaker, mm		0				0				0					0					0													
Breaking capacity		L	M	H	S	L	M	H	S	L	M	H	S	V	R	L	M	H	S	V	R	L	M	H	S	V	R	L	M	H	S	V	R
Rated limiting breaking capacity at short circuit Icu, kA	400 VAC	50	85	100	150	50	85	100	150	50	85	100	150	200	—	50	85	100	150	200	—	50	85	100	150	200	—	50	85	100	150	200	—
	440 VAC	50	70	90	130	50	70	90	130	50	70	90	130	200	—	50	70	90	130	200	—	50	70	90	130	200	—	50	70	90	130	200	—
	500 VAC	—	—	85	—	—	—	85	—	—	—	85	—	—	—	—	—	85	—	—	—	—	—	85	—	—	—	—	—	85	—	—	—
	550 VAC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	690 VAC	10	15	20	35	10	15	20	35	10	15	20	25	50	80	10	20	30	40	50	80	10	20	30	40	50	80	10	20	30	40	50	80
Rated Service Breaking Capacity at Short Circuit Ics, kA	400 VAC	50	85	100	150	50	85	100	150	50	85	100	150	150	—	50	85	100	150	150	—	50	85	100	150	150	—	50	85	100	150	150	—
	440 VAC	50	70	90	130	50	70	90	130	50	70	90	130	130	—	50	70	90	130	130	—	50	70	90	130	130	—	50	70	90	130	130	—
	500 VAC	—	—	85	—	—	—	85	—	—	—	85	—	—	—	—	—	85	—	—	—	—	—	85	—	—	—	—	—	85	—	—	—
	550 VAC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	690 VAC	10	15	20	25	10	15	20	25	10	15	20	25	50	80	10	20	30	40	50	80	10	20	30	40	50	80	10	20	30	40	50	80
Utilization category		A				A				A					B					B													
Short-time withstand current Icw(1s), kA		10000				10000				10000					7500					7500													
Electrical wear resistance, cycles ²⁾	400 VAC	10000				10000				10000					7500					7500													
	690 VAC	1000				1000				1000					1000					1000													
Mechanical wear resistance, cycles ²⁾	Without maintenance	20000				20000				20000					15000					15000													
	With maintenance	40000				40000				40000					30000					30000													
Overall dimensions, mm	Width (3P/4P)	90/120				90/120				105/140					140/184					140/184													
	Height	150				150				165					257					257													
	Depth	85				85				85					110					110													
Protection releases	Thermomagnetic	Power distribution: TM (thermomagnetic), M (magnetic)	Power distribution: TM (thermomagnetic), M (magnetic)				Power distribution: TM (thermomagnetic), M (magnetic)					Power distribution: TM (thermomagnetic), M (magnetic)					Power distribution: TM (thermomagnetic), M (magnetic)																
		Engine protection: TM-M (thermomagnetic), M-M (magnetic)	Engine protection: TM-M (thermomagnetic), M-M (magnetic)				Engine protection: TM-M (thermomagnetic), M-M (magnetic)					Engine protection: TM-M (thermomagnetic), M-M (magnetic)					Engine protection: TM-M (thermomagnetic), M-M (magnetic)																
	Electronic basic	Power distribution: ETN, ETA, ETA-COM	Power distribution: ETN, ETA, ETA-COM				Power distribution: ETN, ETA, ETA-COM					Power distribution: ETN, ETA, ETA-COM					Power distribution: ETN, ETA, ETA-COM																
Engine protection: ETN-M, ETA-M, ETA-M-COM		Engine protection: ETN-M, ETA-M, ETA-M-COM				Engine protection: ETN-M, ETA-M, ETA-M-COM					Engine protection: ETN-M, ETA-M, ETA-M-COM					Engine protection: ETN-M, ETA-M, ETA-M-COM																	
Electronic with measurement of network parameters						Power distribution: ETE Engine protection: ETE-M					Power distribution: ETE Engine protection: ETE-M					Power distribution: ETE Engine protection: ETE-M																	

¹⁾ Magnetic release with short-circuit protection only.

²⁾ Electrical endurance without maintenance indicates the expected number of switching cycles that the equipment can withstand before repair or replacement of parts.

► Designation

OptiMat T250 M ETE 250A 3P

1

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6

1	Series	OptiMat T — circuit breakers
2	Switch standard size by rated current	125 — standard size for rated currents from 1.5 to 125 A 160 — standard size for rated currents from 125 to 160 A 250 — standard size for rated currents from 32 to 250 A 400 — standard size for rated currents from 100 to 400 A 630 — standard size for rated currents from 400 to 630 A
3	Design according to ultimate switching capacity	L: $I_{cu} = 50$ kA at $U_e = 400$ V M: $I_{cu} = 85$ kA at $U_e = 400$ V H: $I_{cu} = 100$ kA at $U_e = 400$ V S: $I_{cu} = 150$ kA at $U_e = 400$ V V: $I_{cu} = 200$ kA at $U_e = 400$ V R: $I_{cu} = 80$ kA at $U_e = 690$ V
4	Type of protection release	TM — for distribution network protection with a thermomagnetic adjustable release for rated currents from 16 to 630 A; M — for distribution network protection with an electromagnetic adjustable release for rated currents from 1.5 to 630 A; TM-M — for electric motor protection with a thermomagnetic adjustable release for rated currents from 16 to 630 A; M-M — for electric motor protection with an electromagnetic adjustable release for rated currents from 1.5 to 630 A; ETN — for protection of distribution networks with basic electronic releases for rated currents from 32 to 630 A; ETN-M — for protection of electric motors with a basic electronic release for rated currents from 32 to 630 A; ETA — for protection of distribution networks with an electronic release with a current indication function for rated currents from 32 to 630 A; ETA-M — for protection of electric motors with an electronic release with a current indication function for rated currents from 32 to 630 A; ETA-COM — for protection of distribution networks with an electronic release with current indication and data transmission functions for rated currents from 32 to 630 A; ETA-M-COM — for protection of electric motors with an electronic release with current indication and data transmission functions for rated currents from 32 to 630 A; ETE — for protection of distribution networks with an electronic release with the current, voltage, energy, harmonics measuring functions and data transmission for rated currents from 100 to 630 A; ETE-M — for protection of electric motors with an electronic release with the current, voltage, energy, harmonics measuring functions and data transmission for rated currents from 100 to 630 A.
5	Rated current of the protection release in amperes	1,5; 2,5; 6; 10; 16; 20; 25; 32; 40; 50; 63; 80; 100; 125; 160; 200; 250; 315; 400; 500; 630
6	Number of circuit breaker poles	3; 4

OptiMat T circuit breakers with thermomagnetic and electronic releases with RCA and RCB leakage current protection units

► Selection guide

Standard size		T125				T250				T400				T630				
Rated body current I_{nm} , A		125				250				400				630				
Number of poles		3, 4				3, 4				3, 4				3, 4				
Rated current I_n , A		1,5 ²⁾ , 2,5 ²⁾ , 6 ²⁾ , 10 ²⁾ , 16, 20, 25, 32, 40, 50, 63, 80, 100, 125				100, 125, 160, 200, 250				100, 250, 315, 400				400, 500, 630				
Rated insulation voltage U_i , V		800				800				800				800				
Rated impulse withstand voltage U_{imp} , kV		8				8				8				8				
Rated operating voltage U_e (V) 50/60 Hz		AC400/AC440				AC400/AC440				AC400/AC440				AC400/AC440				
Arc gap between breaker, mm		0				0				0				0				
Breaking capacity		L	M	H	S	L	M	H	S	L	M	H	S	L	M	H	S	
Rated limiting breaking capacity at short circuit I_{cu} , kA	400 VAC	50	85	100	150	50	85	100	150	50	85	100	150	50	85	100	150	
	440 VAC	50	70	90	130	50	70	90	130	50	70	90	130	50	70	90	130	
Rated service breaking capacity at short circuit I_{cs} , kA	400 VAC	50	85	100	150	50	85	100	150	50	85	100	150	50	85	100	150	
	440 VAC	50	70	90	130	50	70	90	130	50	70	90	130	50	70	90	130	
Rated leakage breaking current $I_{\Delta n}$, A and no triggering time delay Δt , ms	Leakage current protection unit, type RCA (Type A leakage current protection)	Adjustable triggering thresholds	0,05/0,1/0,15/0,2/0,3/0,5/1/3				0,05/0,1/0,15/0,2/0,3/0,5/1/3				0,05/0,1/0,15/0,2/0,3/0,5/1/3				0,05/0,1/0,15/0,2/0,3/0,5/1/3			
		Adjustable time delays	100/200/300/400/500/1000				100/200/300/400/500/1000				100/200/300/400/500/1000				100/200/300/400/500/1000			
	Leakage current protection unit, type RCB (Type B leakage current protection)	Adjustable triggering thresholds	-				0,05/0,1/0,15/0,2/0,3/0,5/1				0,05/0,1/0,15/0,2/0,3/0,5/1				-			
		Adjustable time delays	-				100/200/300/400/500/1000				100/200/300/400/500/1000				-			
Rated non-breaking leakage current, $I_{\Delta n0}$		1/2 $I_{\Delta n}$				1/2 $I_{\Delta n}$				1/2 $I_{\Delta n}$				1/2 $I_{\Delta n}$				
Rated breaking/making capacity at leakage current $I_{\Delta m}$, kA		1/4 I_{cu}				1/4 I_{cu}				1/4 I_{cu}				1/4 I_{cu}				
Utilization category		A				A				B				B				
Short-time withstand current $I_{cw}(1s)$, kA										6				6				
Electric wear resistance, cycles ²⁾	400 VAC	10000				10000				7500				7500				
	Without maintenance	20000				20000				15000				15000				
Mechanical wear resistance, cycles ²⁾	With maintenance	40000				40000				30000				30000				
	Width(3P/4P)	90/120				105/140				140/184				140/184				
Overall dimensions, mm	Height	225				240				357				357				
	Depth	85				85				110				110				
	Protection releases	Thermomagnetic	Power distribution: TM (thermomagnetic), M (magnetic) Engine protection: TM-M (thermomagnetic), M-M (magnetic)				Power distribution: TM (thermomagnetic), M (magnetic) Engine protection: TM-M (thermomagnetic), M-M (magnetic)				Power distribution: TM (thermomagnetic), M (magnetic) Engine protection: TM-M (thermomagnetic), M-M (magnetic)				Power distribution: TM (thermomagnetic), M (magnetic) Engine protection: TM-M (thermomagnetic), M-M (magnetic)			
Electronic basic	Power distribution: ETN, ETA, ETA-COM					Power distribution: ETN, ETA, ETA-COM				Power distribution: ETN, ETA, ETA-COM				Power distribution: ETN, ETA, ETA-COM				
	Engine protection: ETN-M, ETA-M, ETA-M-COM					Engine protection: ETN-M, ETA-M, ETA-M-COM				Engine protection: ETN-M, ETA-M, ETA-M-COM				Engine protection: ETN-M, ETA-M, ETA-M-COM				
Electronic with measurement of network parameters						Power distribution: ETE Engine protection: ETE-M				Power distribution: ETE Engine protection: ETE-M				Power distribution: ETE Engine protection: ETE-M				

¹⁾ Magnetic release with short-circuit protection only.

²⁾ Electrical endurance without maintenance indicates the expected number of switching cycles that the equipment can withstand before repair or replacement of parts.

► Designation

OptiMat T400 M - RCA ETA-COM 400A 4P

	1	2	3	4	5	6	7
1	Series	OptiMat T — circuit breakers					
2	Switch standard size by rated current	125 — standard size for rated currents from 1.5 to 125 A 250 — standard size for rated currents from 32 to 250 A 400 — standard size for rated currents from 100 to 400 A 630 — standard size for rated currents from 400 to 630 A					
3	Design according to ultimate switching capacity	L: $I_{cu} = 50 \text{ kA at } U_e = 400 \text{ V}$ M: $I_{cu} = 85 \text{ kA at } U_e = 400 \text{ V}$ H: $I_{cu} = 100 \text{ kA at } U_e = 400 \text{ V}$ S: $I_{cu} = 150 \text{ kA at } U_e = 400 \text{ V}$					
4	Leakage current protection unit	RCA — leakage current protection unit (leakage type A) RCB — leakage current protection unit (leakage type B) RCA-D — leakage current protection unit (leakage type A) with display RCB-D — leakage current protection unit (leakage type B) with display					
5	Type of protection release	<p>TM — for distribution network protection with a thermomagnetic adjustable release for rated currents from 16 to 630 A;</p> <p>M — for distribution network protection with an electromagnetic adjustable release for rated currents from 1.5 to 630 A;</p> <p>TM-M — for electric motor protection with a thermomagnetic adjustable release for rated currents from 16 to 630 A;</p> <p>M-M — for electric motor protection with an electromagnetic adjustable release for rated currents from 1.5 to 630 A;</p> <p>ETN — for protection of distribution networks with basic electronic releases for rated currents from 32 to 630 A;</p> <p>ETN-M — for protection of electric motors with a basic electronic release for rated currents from 32 to 630 A;</p> <p>ETA — for protection of distribution networks with an electronic release with a current indication function for rated currents from 32 to 630 A;</p> <p>ETA-M — for protection of electric motors with an electronic release with a current indication function for rated currents from 32 to 630 A;</p> <p>ETA-COM — for protection of distribution networks with an electronic release with current indication and data transmission functions for rated currents from 32 to 630 A;</p> <p>ETA-M-COM — for protection of electric motors with an electronic release with current indication and data transmission functions for rated currents from 32 to 630 A;</p> <p>ETE — for protection of distribution networks with an electronic release with the current, voltage, energy, harmonics measuring functions and data transmission for rated currents from 100 to 630 A;</p> <p>ETE-M — for protection of electric motors with an electronic release with the current, voltage, energy, harmonics measuring functions and data transmission for rated currents from 100 to 630 A.</p>					
6	Rated current of the protection release in amperes	1.5; 2.5; 6; 10; 16; 20; 25; 32; 40; 50; 63; 80; 100; 125; 160; 200; 250; 315; 400; 500; 630					
7	Number of circuit breaker poles	3; 4					

OptiMat T circuit breakers with thermomagnetic releases for rated voltage up to 1000 VAC

► Selection guide

Standard size		T250-HV		T400-HV		T630-HV	
Rated body current In, A		250		400		630	
Number of poles		3		3		3	
Rated current In, A		32, 40, 50, 63, 80, 100, 125, 160, 200, 250		250, 315, 400		400, 500, 630	
Rated insulation voltage Ui, V		1000		1000		1000	
Rated impulse withstand voltage Uimp, kV		8		8		8	
Rated operating voltage Ue (V) 50/60 Hz		AC800/AC1000		AC800/AC1000		AC800/AC1000	
Breaking capacity		M	H	M	H	M	H
Rated limiting breaking capacity at short circuit Icu, kA	800 VAC	30	50	30	50	30	50
	1000 VAC	15	15	15	15	15	15
Rated service breaking capacity at short circuit Ics, kA	800 VAC	30	35	30	35	30	35
	1000 VAC	12	15	12	15	12	15
Utilization category		A		A		A	
Electrical wear resistance, cycles	1000 VAC	1000		1000		1000	
Mechanical wear resistance, cycles	With maintenance	12000		8000		8000	
Overall dimensions, mm	Width	110		140		140	
	Height	165		257		257	
	Depth	90		110		110	
Protection releases	Thermomagnetic	Power distribution: TM (thermomagnetic)		Power distribution: TM (thermomagnetic)		Power distribution: TM (thermomagnetic)	

Note: The power supply should be connected to the circuit breaker through the upper terminals

► Designation

OptiMat T630 H-HV TM 630A 3P



1	Series	OptiMat T — circuit breakers
2	Switch standard size by rated current	250 — standard size for rated currents from 32 to 250 A 400 — standard size for rated currents from 250 to 400 A 630 — standard size for rated currents from 400 to 630 A
3	Switching capacity limit design	M: $I_{cu} = 30$ kA at $U_e = 800$ V $I_{cu} = 15$ kA at $U_e = 1000$ V H: $I_{cu} = 50$ kA at $U_e = 800$ V $I_{cu} = 15$ kA at $U_e = 1000$ V
4	Type of protection release	TM — for distribution network protection with a thermomagnetic adjustable release for rated currents from 32 to 630A; M — for distribution network protection with an electromagnetic adjustable release for rated currents from 32.5 to 630A.
5	Rated current of the protection release in amperes	32; 40; 50; 63; 80; 100; 125; 160; 200; 250; 315; 400; 500; 630
6	Number of circuit breaker poles	3

OptiMat T-SD switch-disconnectors

► Selection guide

Standard size		T125-SD	T250-SD	T400-SD	T630-SD
Rated operating voltage Ue, V		AC400, AC690		DC500/750 (3P in series), DC750/1000 (4P in series),	
Rated insulation voltage Ui, V		1000			
Rated impulse withstand voltage Uimp, kV		8			
Rated thermal current Ith, A		125	250	400	630
Rated operating current Ie, A		125	250	400	630
Number of poles		3, 4	3, 4	3, 4	3, 4
Rated making capacity Icm, kA		3,6	4,9	7,1	8,5
Rated short-time withstand current Icw/1s, A		2000	3500	6000	8000
Utilization category		AC-22A(690 VAC), AC-23A(400 VAC), DC-23A(1000 VAC)			
Without current, cycles	AC-22A(690 VAC)	-	-	-	-
	AC-23A(400 VAC)	10000	10000	7500	11000
	AC-23A(690 VAC)	-	-	-	-
	DC-23A(1000 VDC)	15000	15000	14000	14000
	DC-22B(1000 VDC)	-	-	-	-
With current, cycles	AC-22A(690 VAC)	20000	20000	15000	15000
	AC-23A(400 VAC)	10000	10000	7500	4000
	AC-23A(690 VAC)	-	-	-	-
	DC-23A(1000 VDC)	5000	5000	1000	1000
	DC-22B(1000 VDC)	-	-	-	-
Total number of cycles		20000	20000	15000	15000

Note: the overall and connection dimensions, as well as the possibility of equipping with electrical and mechanical accessories, are completely unified between the switch-disconnectors and the corresponding circuit breakers.

► Designation

OptiMat T125-SD 3P



1	Series	OptiMat T — circuit breakers
2	Switch standard size by rated current	125; 250; 400; 630
3	Number of circuit breaker poles	3; 4

OptiMat T circuit breakers with thermomagnetic releases

OptiMat T circuit breakers with thermomagnetic releases are used in AC networks in systems where only protection against overload and short circuit with instantaneous triggering is required. Versions of thermomagnetic releases for distribution network protection and electric motor protection are available, depending on the type of application.

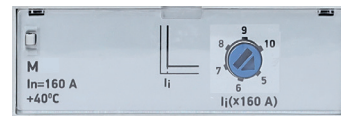
Thermomagnetic releases for distribution network protection

Available types of protection releases

Thermomagnetic TM
Adjustable overload and short circuit protection settings



Magnetic M
Adjustable short circuit protection setting



TM thermomagnetic release setpoints

Protection	Standard size	Rated current In, A	Overload protection setpoints Ir	Triggering characteristics
Защита от перегрузки	T125	16 - 125	Ir=(0.8-0.9-1.0)In	1,05In (cold), no triggering within 1h (In≤63A) 1,3In (hot), triggering ≤1h (In≤63A) 1,05In (cold), no triggering within 2h (In>63A) 1,3In (warm), triggering ≤2h (In>63A)
	T160	125 - 160		
	T250	32 - 100	Ir=In	
		125 - 250		
	T400	250 - 400	Ir=(0.8-0.9-1.0)In	
T630	400 - 630			

Protection	Standard size	Rated current In, A	Short circuit protection settings Ii	Triggering characteristics
Short-circuit protection	T125	16 - 50	Ii=10In	Instant response
		63 - 125	Ii=(5-6-7-8-9-10) In	
	T160	125 - 160		
	T250	32 - 100	Ii=10In	
		125 - 250		
T400	250 - 400	Ii=(5-6-7-8-9-10) In		
T630	400 - 630			
Actuation precision			±20%	

Protection	Standard size	Rated current In, A	Protection current setpoint from overload for neutral pole IrN, A	Setting value of short-circuit protection current for neutral pole IiN, A
Neutral protection (4-pole switch)	T125	16 - 63	IrN=Ir	IiN=Ii
		80 - 125	IrN=Ir/In*63	IiN=Ii/In*63
	T160	125 - 160	IrN=Ir/In*80	IiN=Ii/In*80
	T250	32 - 63	IrN=Ir	IiN=Ii
		80 - 100	IrN=Ir/In*63	IiN=Ii/In*63
	T400	125 - 250	IrN=Ir/In*125	IiN=Ii/In*125
		250 - 400	IrN=Ir/In*225	IiN=Ii/In*225
	T630	400 - 630	IrN=Ir/In*400	IiN=Ii/In*400

Magnetic release settings M

Protection	Standard size	Rated current In, A	Short circuit protection settings Ii	Triggering characteristics
Short-circuit protection	T125	1,5 - 50	Ii=10In	Instant response
		63 - 125	Ii=(5-6-7-8-9-10) In	
	T160	125 - 160		
	T250	32 - 100	Ii=10In	
		125 - 250	Ii=(5-6-7-8-9-10) In	
T400	250 - 400			
T630	400 - 630			
Actuation precision			±20%	
Neutral protection (4-pole switch)	T125	1,5 - 63	IiN=Ii	
		80 - 125	IiN=Ii/In*63	
	T160	125 - 160	IiN=Ii/In*80	
		T250	32 - 63	
	80 - 100		IiN=Ii/In*63	
	125 - 250		IiN=Ii/In*125	
	T400	250 - 400	IiN=Ii/In*225	
T630	400 - 630	IiN=Ii/In*400		

Thermomagnetic releases for electric motor protection

Available types of protection releases

Thermomagnetic TM-M

Adjustable overload and short circuit
protection settings



Magnetic M-M

Adjustable short circuit protection
setting



TM-M thermomagnetic release setpoints

Protection	Standard size	Rated current In, A	Overload protection settings, Ir	Triggering characteristics
Защита от перегрузки	T125	16 - 125	Ir=(0,8-0,9-1,0)In	1,0In (cold), no triggering within 2h 1,2In (hot), triggering < 2h 1,5In (hot), ≤4min (T125, T160, T250) ≤8min (T400, T630) 7,2In (cold), 4s<Ttrigg≤10s (T125, T160, T250) 6s<Ttrigg≤2s (T400, T630) Release class: 10 for T125, T160, T250 20 for T400, T630
	T160	125 - 160		
	T250	32 - 100	Ir=In	
		125 - 250	Ir=(0,8-0,9-1,0)In	
	T400	250 - 400		
T630	400 - 630			

Protection	Standard size	Rated current In, A	Short circuit protection settings Ii	Triggering characteristics
Short-circuit protection	T125	16 - 50	Ii=12In	Instant response
		63 - 125	Ii=(10-12-14) In	
	T160	125 - 160		
	T250	32 - 100	Ii=12In	
		125 - 250	Ii=(10-12-14) In	
T400	250 - 400			
T630	400 - 630			
Actuation precision			±20%	

Magnetic release setpoints M-M

Protection	Standard size	Rated current In, A	Short circuit protection settings Ii	Triggering characteristics
Short-circuit protection	T125	1,5 - 50	Ii=12In	Instant response
		63 - 125	Ii=(10-12-14) In	
	T160	125 - 160		
	T250	32 - 100	Ii=12In	
		125 - 250	Ii=(10-12-14) In	
T400	250 - 400			
T630	400 - 630			
Actuation precision			±20%	

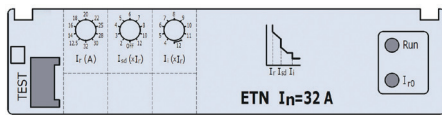
OptiMat T circuit breakers with electronic releases

OptiMat T circuit breakers with electronic releases are used in AC networks in systems where it is necessary to provide a high protection level and range, including selective short-circuit protection, ground fault protection and additional motor protection. Electronic releases also provide additional capabilities for operation, dispatching, indication and data display.

Versions of electronic releases for distribution network protection and electric motor protection are available, depending on the type of application.

Electronic releases for distribution network protection

Available types of protection releases



ETN

Release with basic protection functions and a range of adjustments.

Protections: overload, selective short circuit, instantaneous short circuit with current adjustments only.



ETA
ETA-COM

A wide range of protection functions and adjustment ranges, measurement and display of currents, data transmission via the Modbus RTU protocol (for ETA-COM).

Protections: against overload, selective short-circuit, instantaneous short-circuit, ground fault, thermal memory for overload protection and selective short-circuit protection.



ETE

Maximum set of protection functions and adjustment ranges, measurement of network parameters: currents, voltage, power, energy, frequency, harmonic distortion THDi and THDu, display of operating data and trigger logs and measurement logs, and transmission via the Modbus RTU protocol.

Protections: against overload, selective short-circuit, instantaneous short-circuit, ground fault, thermal memory for overload protection and selective short-circuit protection.

► Functions and capabilities of electronic protection releases for distribution networks

Function		Type of release				
		ETN	ETA	ETA-COM	ETE	
Security functions	Basic security features	Overload protection	√	√	√	√
		Short-time short-circuit protection	√	√	√	√
		Short circuit protection with instantaneous triggering	√	√	√	√
	Extended protection	Earth-fault protection	-	√	√	√
Measurement functions	Additional functions	Overload pre-alarm	√	√	√	√
		Thermal memory function	√	√	√	√
	Currents	Phase and neutral currents I ₁ , I ₂ , I ₃ , I _n ¹⁾	-	√	√	√
		Earth-fault current I _g	-	√	√	√
	Stresses	Line voltages U ₁₂ , U ₂₃ , U ₃₁ Line voltage unbalance ε _U	-	-	-	√
		Phase voltages ¹⁾ U _{1N} , U _{2N} , U _{3N} Phase voltage unbalance ¹⁾ ε _V	-	-	-	√
	Power	Active, reactive and apparent power, power factor	-	-	-	√
	Energy	Active, reactive, total energy	-	-	-	√
	Consumption	Current and power consumption	-	-	-	√
	Frequency		-	-	-	√
Harmonic distortion of current and voltage THDi, THDu		-	-	-	√	
Phase alternation	1-2-3 or 1-3-2	-	-	-	√	

Function				Type of release			
				ETN	ETA	ETA-COM	ETE
Operating functions	Settings	Rotary switches	Ir, tr, Isd, tsd, Ii	√ (fixed tr, tsd)	√	√	√
			Ig, tg	-	√	√	√
		DIP switches	Setting mode remote/local	-	-	√	√
	Setting neutral protection ³⁾ N 50%/100%		-	√	√	√	
	Indication on release	Trigger information	Triggering current for protections Ir, Isd, Ii, triggering time, phase	√ ²⁾	√	√	√
			Earth fault current Ig, trigger time	-	√	√	√
		Alarm indication	LED indicators	-	√	√	√
		Testing	Connector on the front panel of the release	√	√	√	√
	Operational information (digital data transmission)	Operation statistics	Number of triggers, operating time	-	-	-	√
		Load profile	Operating time at different load levels: (0~49%) In, (50%~79%) In (80%~89%) In, ≥90% In	-	-	-	√
	Measurement history and trigger log (digital data transmission)	History of max/min value measurements	Max/min current	-	-	√	√
			Maximum/minimum voltage	-	-	-	√
			Max/min power factor	-	-	-	√
			Maximum/minimum frequency	-	-	-	√
Maximum current consumed			-	-	-	√	
Trigger log	10 last triggers Type of protection triggered, current, response time	-	-	√	√		
Display functions on the display	LCD display ³⁾	Triggering	Type of protection triggered, current, response time	-	√	√	√
		Current values	Phase and neutral currents I1, I2, I3, IN ¹⁾	-	√	√	√
			Earth-fault current Ig	-	√	√	√
			Current unbalance εI	-	-	-	√
		Voltage values	Line voltages U12, U23, U31, εU	-	-	-	√
Phase voltages U1N, U2N, U3N, εV ¹⁾	-		-	-	√		
Communications	Communication with release	Modbus RTU data transfer protocol	-	-	√	√	
Additional modules	ET TEST testing unit	Reading, setting, testing of triggering	○	○	○	○	
	External display ET HMI	Reading, setting, control of the switch	-	-	○	○	
	Module MZSI ⁴⁾	Zone selectivity module MZSI ⁴⁾	-	○	○	○	

«√» standard function, «○» additional function/accessory, «-» none

Notes:

¹⁾ Only available for 4-pole OptiMat T circuit breaker.

²⁾ Reading triggering information via the ET TEST testing unit.

³⁾ The ETA and ETA-COM release for T125-T160 does not have a display.

⁴⁾ MZSI module is only available for T400-T630.

When the overload protection Ir=OFF is disabled for ETA, ETA-COM or ETE releases, the Iro LED will flash but no triggering will occur.

ETN Basic Release Protection Settings

Protection function	Standard size	Rated current In, A	Current setpoint values, A	Trigger time	Possibility of disabling	
Overload protection	T125	32	Ir=12,5-14-16-18-20-22-25-28-30-32	I2t characteristic 1,05Ir, no triggering within 2h 1,3Ir, triggering within 2h tr = 120 s at 1,5-Ir	-	
		63	r=25-28-32-36-40-45-50-56-60-63			
		125	Ir=50-56-63-70-75-80-90-100-112-125			
	T160	160	Ir=63-70-75-80-90-100-112-125-140-160			
		T250	32			Ir=12,5-14-16-18-20-22-25-28-30-32
			63			Ir=25-28-32-36-40-45-50-56-60-63
	125		Ir=50-56-63-70-75-80-90-100-112-125			
	T400	250	Ir=100-112-125-140-150-160-180-200-225-250			
		100	Ir=40-45-50-56-63-70-75-80-90-100			
		250	Ir=100-112-125-140-150-160-180-200-225-250			
T630	400	Ir=160-180-200-225-250-280-315-350-400				
630	Ir=250-280-315-350-375-400-450-500-560-630					
Actuation precision				1,3Ir~4In: ±10% ≥4In: ±20%		
Thermal memory				10 min after triggering		
Short circuit protection with time delay	T125...T630	32~630	Isd=(2-3-4-5-6-7-8-10-12)Ir; OFF	tsd = 0,2 s at 8Ir I2t at Isd ≤ I ≤ 8Ir t = k at I > 8Ir	Can be disabled	
Actuation precision			±10%	±15%		
Thermal memory				5 min after triggering		
Instant short circuit protection	T125...T630	32~630	Ii=(4-5-6-7-8-9-10-11-12)Ir	Instant response less than 50 ms	Can be disabled using the ET TEST unit (for T400-T630)	
Actuation precision			±15%			
Overload pre-alarm	T125...T630	32~630	Ir _o =0,9Ir			
Neutral protection (4-pole switch)	T125	32/63	IrN=Ir, IsdN=Isd, IiN=Ii			
		125	IrN=0,5Ir, IsdN=0,5Isd, IiN=0,5Ii			
	T160	160	IrN=0,5Ir, IsdN=0,5Isd, IiN=0,5Ii			
		32/63	IrN=Ir, IsdN=Isd, IiN=Ii			
	T250	125/250	IrN=Ir, IsdN=Isd, IiN=Ii			
	T400	100/250/400	IrN=0,5Ir, IsdN=0,5Isd, IiN=0,5Ii			
T630	630	IrN=0,5Ir, IsdN=0,5Isd, IiN=0,5Ii				

Note: Response time accuracy with autonomous release power supply.

Protection settings of functional releases ETA and ETA-COM

Protection function	Standard size	Rated current I _n , A	Current setpoint values, A	Trigger time	Possibility of disabling	
Overload protection	T125	32	Ir=12,5-14-16-18-20-22-25-28-30-32	I2t characteristic 1,05Ir, no triggering within 2h 1,3Ir, triggering within 2h tr = 15-30-60-120-240 s at 1,5Ir	Can be disabled	
		63	r=25-28-32-36-40-45-50-56-60-63			
		125	Ir=50-56-63-70-75-80-90-100-112-125			
	T160	160	Ir=63-70-75-80-90-100-112-125-140-160			
		T250	32			Ir=12,5-14-16-18-20-22-25-28-30-32
			63			Ir=25-28-32-36-40-45-50-56-60-63
	125		Ir=50-56-63-70-75-80-90-100-112-125			
	T400	250	Ir=100-112-125-140-150-160-180-200-225-250			
		100	Ir=40-45-50-56-63-70-75-80-90-100			
		250	Ir=100-112-125-140-150-160-180-200-225-250			
T630	400	Ir=160-180-200-225-250-280-315-350-375-400				
T630	630	Ir=250-280-315-350-375-400-450-500-560-630				
Actuation precision				1,3Ir~4In: ±10% ≥4In: ±20%		
Thermal memory				10 мин после срабатывания		
Short circuit protection with time delay	T125...T630	32~630	Isd=(2-2,5-3-4-5-6-7-8-10-12)Ir	tsd = (0,1; 0,2; 0,3; 0,4) s; OFF Modes: I2t and t=k At I2t: tsd = I2t at Isd ≤ I ≤ 8Ir tsd = k at I > 8Ir At t = k: tsd = k	Can be disabled	
Actuation precision			±10%	tsd = 0,1s: ±0,03s 0,2 s ≤ tsd ≤ 0,4 s: ± 15%		
Thermal memory				5 min after triggering		
Instant short circuit protection	T125...T630	32~630	Ii=(4-5-6-7-8-9-10-11-12)Ir	Instant response less than 50 ms	Can be disabled using the ET TEST unit (for T400-T630)	
Actuation precision			±15%			
Earth-fault protection	T125...T250	32~630	Ig=(0,4-0,5-0,6-0,7-0,8-0,9-1,0)In	tg=0,3 s	Can be disabled	
	T250...T630	100~630	Ig=(0,2-0,3-0,4-0,5-0,6-0,7-0,8-0,9-1,0)In	tg=(0,1-0,2-0,3-0,4)s; OFF		
Actuation precision			±10%	tg=0,1-0,2 s: ±0,03s tg=0,3-0,4 s: ±10%		
Overload pre-alarm	T125...T630	32~630	Ir0=0,9Ir			
Neutral protection (4-pole switch)	T125	32/63	Ir1N=Ir1, Ir2N=Ir2, Ir3N=Ir3			
		125	IrN=0,5Ir, IsdN=0,5Isd, IiN=0,5Ii, IrN=Ir, IsdN=Isd, IiN=Ii			
	T160	160	User customization			
		32/63	IrN=Ir, IsdN=Isd, IiN=Ii			
	T250	125/250	IrN=0,5Ir, IsdN=0,5Isd, IiN=0,5Ii, IrN=Ir, IsdN=Isd, IiN=Ii			
		100/250/400	IiN=Ii			
T630	630	User customization				

Note: Response time accuracy with autonomous release power supply.

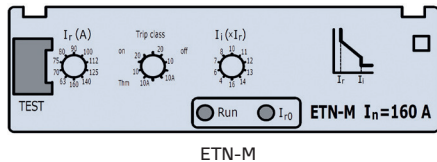
ETE Advanced Release Protection Settings

Protection function	Standard size	Rated current I _n , A	Current setpoint values, A	Trigger time	Possibility of disabling
Overload protection	T250	100	Ir=40-45-50-56-63-70-75-80-90-100	I2t characteristic 1,05Ir, no triggering within 2h 1,3Ir, triggering within 2h tr = 15-30-60-120-240 s at 1,5Ir	Can be disabled
		250	Ir=100-112-125-140-150-160-180-200-225-250		
	T400	100	Ir=40-45-50-56-63-70-75-80-90-100		
		250	Ir=100-112-125-140-150-160-180-200-225-250		
		400	Ir=160-180-200-225-250-280-315-350-375-400		
T630	630	Ir=250-280-315-350-375-400-450-500-560-630			
Actuation precision				±10%	
Thermal memory				10 min after triggering	
Short circuit protection with time delay	T250...T630	100~630	Isd=(2-2,5-3-4-5-6-7-8-10-12)Ir	tsd = (0,1; 0,2; 0,3; 0,4) s; OFF Modes: I2t and t=k At I2t: tsd = I2t at Isd ≤ I ≤ 8Ir tsd = k at I > 8Ir At t = k: tsd = k	Can be disabled
Actuation precision			±10%	tsd = 0,1c: ±0,03c 0,2 c ≤ tsd ≤ 0,4 c: ± 15%	
Thermal memory				5 min after triggering	
Instant short circuit protection	T250...T630	100~630	Ii=(4-5-6-7-8-9-10-11-12)Ir	Instant response less than 50 ms	Can be disabled using the ET TEST unit (for T400-T630)
Actuation precision			±10%		
Earth-fault protection	T250...T630	100~630	Ig=(0,2-0,3-0,4-0,5-0,6-0,7-0,8-0,9-1,0)In	tg=(0,1-0,2-0,3-0,4)s; OFF	Can be disabled
Actuation precision			±10%	tg= 0,1-0,2 s: ±0,03s tg= 0,3-0,4 s: ±10%	
Overload pre-alarm	T250...T630	100~630	Ir0=0,9Ir		
Neutral protection (4-pole switch)	T250	100/250	IrN=0,5Ir, IsdN=0,5Isd, IiN=0,5Ii, IrN=Ir, IsdN=Isd, IiN=Ii		
	T400	100/250/400	IiN=Ii		
	T630	630	User customization		

Note: Response time accuracy with autonomous release power supply.

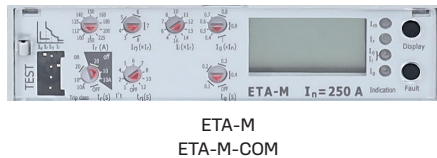
Electronic releases for electric motor protection

Available types of protection releases



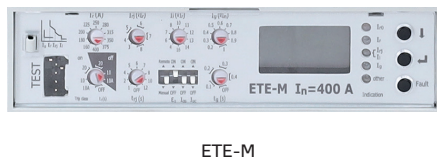
Release with basic protection functions and a range of adjustments.

Protection: against overload according to release class, instantaneous protection from short circuit, phase imbalance/breakage.



A wide range of protection functions and adjustment ranges, measurement and display of currents, data transmission via the Modbus RTU protocol (for ETA-M-COM).

Protection: against overload according to release class, instantaneous protection from short circuit, phase imbalance/breakage, rotor jamming, ground fault.



Maximum set of protection functions for comprehensive protection of electric motors and adjustment ranges, measurement of network parameters: currents, voltage, power, energy, frequency, harmonic distortion THDi and THDu, display of operating data and trigger logs and measurement logs, and transmission via the Modbus RTU protocol.

Protection: against overload according to release class, instantaneous protection from short circuit, phase imbalance/breakage, rotor jamming, ground fault, delayed start, undercurrent.

► Functions and capabilities of electronic protection releases for distribution networks

Function		Type of release					
		ETN-M	ETA-M	ETA-M-COM	ETE-M		
Security functions	Basic security features	Overload protection	√	√	√	√	
		Short circuit protection with instantaneous triggering	√	√	√	√	
	Extended protection	Earth-fault protection	-	√	√	√	
		Rotor jamming protection	-	√	√	√	
		Phase fault/unbalance protection	√	√	√	√	
		Delayed start protection	-	-	-	√	
	Additional functions	Undercurrent protection	-	-	-	√	
Overload pre-alarm		√	√	√	√		
Measurement functions	Currents	Thermal memory function	√	√	√	√	
		Phase and neutral currents I1, I2, I3	-	√	√	√	
	Stresses	Earth-fault current I _g	-	√	√	√	
		Line voltages U12, U23, U31	-	-	-	√	
	Power	Line voltage unbalance εU	-	-	-	√	
		Active, reactive and apparent power, power factor	-	-	-	√	
		Energy	Active, reactive, total energy	-	-	-	√
		Consumption	Current and power consumption	-	-	-	√
Frequency		-	-	-	√		
Harmonic distortion of current and voltage THDi, THDu		-	-	-	√		
Phase alternation		-	-	-	√		
Operating functions	Rotary switches	1-2-3 or 1-3-2	-	-	-	√	
		I _r , tr (release class), I _{rj} , tr _j , I _i	√ (no I _{rj} , tr _j)	√	√	√	
		Earth fault protection I _g , t _g	-	√	√	√	
	Indication on release	Phase fault/unbalance protection φ _{as} εI	-	√	√	-	
		Phase fault/unbalance protection φ _{as} εI	-	-	-	√	
		Delayed start protection I _{os} , t _{os}	-	-	-	√	
	DIP switches	Undercurrent protection I _{uc} , t _{uc}	-	-	-	√	
		Setting mode remote/local	-	-	√	√	
	Current unbalance εI (ON / OFF)	-	-	-	√		
	Delayed start I _{os} , minimum current I _{uc} (ON / OFF)	-	-	-	√		

Function				Type of release			
				ETN-M	ETA-M	ETA-M-COM	ETE-M
Operating functions	Indication on release	Trigger information	Triggering current for protections Ir, tr, Ii, triggering time, phase	√ ¹⁾	√	√	√
			Triggering current for protection Irj, εI, trigger time	-	√	√	√
			Triggering for Ios, Iuc protections, trigger time	-	-	-	√
			Triggering current for protection Ig, trigger time	-	√	√	√
		Alarm indication	LED indicators	-	√	√	√
	Operational information (digital data transmission)	Testing	Connector on the front panel of the release	√	√	√	√
		Operation statistics	Number of triggers, operating time	-	-	-	√
		Heat load percentage		-	-	-	√
		Load profile	Operating time at different load levels: (0~49%) In, (50%~79%) In (80%~89%) In, ≥90 % In	-	-	-	√
	Measurement history and trigger log (digital data transmission)	History of max/min value measurements	Max/min current	-	-	√	√
			Maximum/minimum voltage	-	-	-	√
			Max/min power factor	-	-	-	√
			Maximum/minimum frequency	-	-	-	√
			Maximum current consumed	-	-	-	√
		Trigger log	10 last triggers Type of protection triggered, current, response time	-	-	√	√
Display functions on the display	LCD display ²⁾	Triggering	Type of protection triggered, current, response time	-	√	√	√
			Phase currents I1, I2, I3	-	√	√	√
		Current values	Earth-fault current Ig	-	-	-	√
			Current unbalance εI	-	-	-	√
		Voltage values	Linear voltages U12, U23, U31, εU	-	-	-	√
Communications	Communication with release	Modbus RTU data transfer protocol	-	-	√	√	
Additional modules	Contactor control module ET CCM			-	○	○	○
	External display ET HMI		Reading, setting, control of circuit breaker	-	-	○	○
	ET TEST testing unit		Reading, setting, testing of triggering	○	○	○	○
			Setting the phase break/unbalance protection εI	○	-	-	-

«√» standard function, «○» additional function/accessory, «-» none

Notes:

¹⁾ Reading triggering information via the ET TEST testing unit.

²⁾ The ETA-M and ETA-M-COM release for T125-T160 does not have a display.

When the overload protection Ir=OFF is disabled for ETA-M, ETA-M-COM or ETE-M releases, the Iro LED will flash but no triggering will occur.

ETN-M Basic Release Protection Settings

Protection function	Standard size	Rated current In, A	Current setpoint values, A	Trigger time				Possibility of disabling		
Overload protection	T125	32	Ir=12,5-14-16-18-20-22-25-28-30-32	1,05Ir	no triggering within 2h				-	
		63	r=25-28-32-36-40-45-50-56-60-63		triggering within 2h					
		125	Ir=50-56-63-70-75-80-90-100-112-125		1,5Ir	<2min	<4min	<8min		Mode
	T250	160	Ir=63-70-75-80-90-100-112-125-140-160			7,2Ir, tr	3s	7s		13s
		32	Ir=12,5-14-16-18-20-22-25-28-30-32		Release class	10A	10	20		
		63	Ir=25-28-32-36-40-45-50-56-60-63							
		125	Ir=50-56-63-70-75-80-90-100-112-125							
	250	Ir=100-112-125-140-150-160-180-200-225-250								
	T400	100	Ir=40-45-50-56-63-70-75-80-90-100							
		250	Ir=100-112-125-140-150-160-180-200-225-250							
400		Ir=160-180-200-225-250-280-315-350-375-400								
T630	630	Ir=250-280-315-350-375-400-450-500-560-630								
Actuation precision				1,2Ir~4In: ±10% ≥4In: ±20%						
Thermal memory								Can be disabled		
Instant short circuit protection	T125	32/63/125	Ii=(4-6-7-8-10-11-12-13-14-16)Ir	Instant response less than 50 ms				Can be disabled using the ET TEST unit (for T400-T630)		
	T160	160								
	T250	32/63/125/160/250								
	T400	100/250								
		400								
T630	630	Ii=(4-5-6-7-8-9-10-11-12-14)Ir								
Actuation precision				±15%						
Phase loss/voltage unbalance protection	T125...T630	32~630	εI = 90%	te=0,25s				Can be disabled using the ET TEST unit		
Actuation precision				±10%						
Pre-alarm overload signaling	T125...T630	32~630	Ir0=0,9Ir							

Note: Response time accuracy with autonomous release power supply.

Protection settings of functional releases ETA-M and ETA-M-COM

Protection function	Standard size	Rated current In, A	Current setpoint values, A	Trigger time	Possibility of disabling																									
Overload protection	T125	32	Ir=12,5-14-16-18-20-22-25-28-30-32	<table border="1"> <tr> <td>1,05Ir</td> <td colspan="4">no triggering within 2h</td> </tr> <tr> <td>1,2Ir</td> <td colspan="4">triggering within 2h</td> </tr> <tr> <td>1,5Ir</td> <td><2min</td> <td><4min</td> <td><8min</td> <td>Mode</td> </tr> <tr> <td>7,2Ir, tr</td> <td>3s</td> <td>7s</td> <td>13s</td> <td>Cold</td> </tr> <tr> <td>Release class</td> <td>10A</td> <td>10</td> <td>20</td> <td></td> </tr> </table>	1,05Ir	no triggering within 2h				1,2Ir	triggering within 2h				1,5Ir	<2min	<4min	<8min	Mode	7,2Ir, tr	3s	7s	13s	Cold	Release class	10A	10	20		Can be disabled
		1,05Ir	no triggering within 2h																											
	1,2Ir	triggering within 2h																												
	1,5Ir	<2min	<4min		<8min	Mode																								
	7,2Ir, tr	3s	7s		13s	Cold																								
	Release class	10A	10		20																									
	63	r=25-28-32-36-40-45-50-56-60-63																												
	T160	125	Ir=50-56-63-70-75-80-90-100-112-125																											
		160	Ir=63-70-75-80-90-100-112-125-140-160																											
	T250	32	Ir=12,5-14-16-18-20-22-25-28-30-32																											
63		Ir=25-28-32-36-40-45-50-56-60-63																												
125		Ir=50-56-63-70-75-80-90-100-112-125																												
T400	250	Ir=100-112-125-140-150-160-180-200-225-250																												
	100	Ir=40-45-50-56-63-70-75-80-90-100																												
	250	Ir=100-112-125-140-150-160-180-200-225-250																												
T630	400	Ir=160-180-200-225-250-280-315-350-375-400																												
T630	630	Ir=250-280-315-350-375-400-450-500-560-630																												
Actuation precision				1,2Ir~4In: ±10% ≥4In: ±20%																										
Thermal memory					Can be disabled																									
Rotor jam protection	T125...T630	32~630	Irj=(3-4-5-6-7-8)Ir	trj=(1-2-4-5-6-7-8-10-12)s; OFF	Can be disabled using the ET TEST unit																									
Actuation precision			±10%	±10%																										
Instant short circuit protection	T125	32/63/125	Ii=(4-6-7-8-10-11-12-13-14-16)Ir	Instant response less than 50 ms	Can be disabled using the ET TEST unit (for T400-T630)																									
	T160	160																												
	T250	32/63/125/160/250																												
	T400	100/250																												
	T630	400																												
Actuation precision			±15%																											
Earth-fault protection	T125...T160	32~630	Ig=(0,4-0,5-0,6-0,7-0,8-0,9-1,0)In; OFF	tg=0,3 s	Can be disabled																									
	T250...T630	32~630	Ig=(0,4-0,5-0,6-0,7-0,8-0,9-1,0)In; OFF	tg=(0,1-0,2-0,3-0,4)s; OFF																										
Actuation precision			±10%	0,1s, 0,2s; ±0,03s 0,3s, 0,4s; ±10%																										
Phase loss/voltage unbalance protection	T125...T630	32~630	εI = 30%-40%-50%-60%-70%-80%-Off	te=4s (Skew) te=0,25s (Phase break)	Can be disabled																									
Actuation precision			±10%	±10% (Skew) ±20% (Phase break)																										
Pre-alarm overload signaling	T125...T630	32~630	Ir0=0,9Ir																											

Note: Response time accuracy with autonomous release power supply.

ETE-M Advanced Release Protection Settings

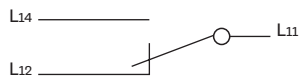
Protection function	Standard size	Rated current In, A	Current setpoint values, A	Trigger time	Possibility of disabling	
Overload protection	T250	125	Ir = 40-45-50-56-63-70-75-80-90-100	1,05Ir	no triggering within 2h	Can be disabled
		250	Ir = 100-112-125-140-150-160-180-200-225-250	1,2Ir	triggering within 2h	
	T400	100	Ir = 40-45-50-56-63-70-75-80-90-100	1,5Ir	<2min <4min <8min Mode	
		250	Ir = 100-112-125-140-150-160-180-200-225-250	7,2Ir, tr	3c 7c 13c Cold	
	T630	400	Ir = 160-180-200-225-250-280-315-350-375-400	Release class	10A 10 20	
		630	Ir = 250-280-315-350-375-400-450-500-560-630			
Actuation precision				±10%		
Thermal memory					Can be disabled	
Rotor jamming protection	T250...T630	100~630	Irj=(3-4-5-6-7-8)Ir	trj=(1-2-4-5-6-7-8-10-12)s; OFF	Can be disabled	
Actuation precision			±10%			
Instant short circuit protection	T250	100/250	Ii=(4-6-7-8-10-11-12-13-14-16)Ir	Instant response less than 50 ms	Can be disabled using the ET TEST unit (for T400-T630)	
	T400	100/250				
	T630	400				
Actuation precision			±10%			
Earth-fault protection	T250...T630	100~630	Ig=(0,2-0,3-0,4-0,5-0,6-0,7-0,8-0,9-1,0)In	tg=(0,1-0,2-0,3-0,4)s; OFF	Can be disabled	
Actuation precision			±10%	0,1s, 0,2s; ±0,03s 0,3s, 0,4s; ±10%		
Phase loss/voltage unbalance protection	T250...T630	100~630	εI = 30%-40%-50%-60%-70%-80%-Off	te=4c (Skew) te=0,25c (Phase break)	Can be disabled	
Actuation precision			±10%	±10% (Skew) ±20% (Phase break)		
Delayed start protection	T250...T630	100~630	I _{os} = (1÷8)Ir	t _{os} = (1÷200) s	Can be disabled	
Setting step			0,5-Ir	1 s		
Actuation precision			± 10%	± 10%		
Undercurrent protection	T250...T630	100~630	I _{uc} = (0,3÷0,9)Ir	t _{uc} = (1÷200) s	Can be disabled	
Setpoint step			0,05-Ir	1 s		
Permissible tolerance			± 10%	± 10%		
Pre-emergency overload signaling	T250...T630	100~630	I _{ro} = 0,9-Ir			

Note: Response time accuracy with autonomous release power supply.

OptiMat T Circuit breakers with RCA and RCB leakage current protection units

OptiMat T circuit breakers with leakage current protection units are ready-made devices consisting of a standard corresponding OptiMat T circuit breaker with a thermomagnetic or electronic release, as well as a built-in leakage current protection unit. The protection unit provides monitoring and measurement of leakage currents to ensure protection of personnel from electric shock and equipment from fires caused by earth leakage due to insulation damage.

The leakage current protection unit operates independently of the thermomagnetic or electronic release, therefore, after triggering due to leakage, after eliminating the problem, in order to re-close the circuit breaker, it is necessary to reset the triggering on the unit itself using the reset button. To indicate the operation of the leakage current protection unit, it is equipped with an output dry alarm contact.



Two different types of leakage current protection units are available:
 - RCA - leakage protection unit type A
 - RCB - leakage protection unit type B

Setpoints of RCA and RCB leakage current protection units

Protection	Standard size	Leakage current protection unit	Leakage current protection settings $I\Delta n$, A	Triggering characteristics											
				Trigger delay Δt , ms (no triggering time)	0	100	200	300	400	500	1000	2000	3000		
Leakage current protection Type A	T125/T250	RCA	0.05, 0.1, 0.15, 0.2, 0.3, 0.5, 1, 3	Trigger delay Δt , ms (no triggering time)	0	100	200	300	400	500	1000				
	T400/T630	RCA		Maximum response time, ms	<40	<200	<300	<400	<500	<600	<1200				
				Note: According to IEC 60947-2, instantaneous triggering - at current greater than $5I\Delta n$; delayed triggering - at current $2I\Delta n$.											
Leakage current protection Type B	T250	RCB	0.05, 0.1, 0.15, 0.2, 0.5, 1	Trigger delay Δt , ms (no triggering time)	0	100	200	300	400	500	1000	2000	3000		
	T400	RCB		Maximum response time, ms	<40	<200	<300	<400	<500	<600	<1200	<2400	<3600		
				Note: According to IEC 60947-2, instantaneous triggering - at current greater than $5I\Delta n$; delayed triggering - at current $2I\Delta n$.											

► Standard and special protection functions of electronic releases

Overload protection (ANSI 49)

With $t = k/I^2$ characteristic, with inversely dependent long-term response delay. For releases in the electric motor protection version, there is a time delay setting in accordance with trigger classes according to COST IEC 60947-4.

Short-time withstand short-circuit protection (ANSI 51 and 50TD)

With a constant response time ($t = k$), or with a constant specific let-through energy ($t = k/I^2$) to ensure selective coordination of protection or withstand at starting currents.

Thermal memory

For distribution network protection releases, when an overcurrent occurs and until the protection is triggered, the thermal energy generated by the current is calculated. In the event of reactivation and an overcurrent above the protection setting, the triggering time of the release will be lower than the delay setting to ensure protection against additional overheating of equipment. If power is available and there is no overcurrent, the thermal memory of the overload protection is reset after 10 minutes, and the short-time short-circuit protection is reset after 5 minutes. When power is removed from the release, the thermal memory is reset immediately.

Instantaneous short circuit protection (ANSI 50)

Instantaneous triggering, easy to disable.

Ground fault protection (ANSI 50NTD)

With constant trigger delay time ($t = k$). Provides calculation of ground fault current using the vector sum method of phase currents for 3-pole circuit breaker and phase and neutral currents for 4-pole circuit breaker.

Neutral protection

Available for 4-pole circuit breakers with fixed or adjustable overload and short-circuit protection setpoints in the neutral pole.

Rotor jamming protection

For releases of the motor protection version with a constant adjustable response time.

Thermal memory for engine protection

For releases of the motor protection version - allows for a reduction in response time during repeated overloads.

Protection against phase imbalance/breakage

For releases of the motor protection version - ensures triggering with a time delay when the current imbalance of any of the phases is greater than the average value by a specified threshold, or when any of the phases is broken.

Delayed start protection

For ETE-M releases for electric motor protection, it ensures triggering in case of emergency delayed start. Allows setting the starting current and permissible starting time.

Undercurrent protection

For ETE-M releases for motor protection, it provides protection against operation under conditions where the load is very low or not available. The protection is triggered if the current in all phases drops below the set threshold for a period longer than the set time delay.

► Operation and maintenance capabilities

Manual adjustment of main protection setpoints

The protection triggering panel provides local manual setting and monitoring of the main protection settings for energy distribution (motor protection) I_r , tr (trigger class), I_{sd} (I_{rj}), t_{sd} (trj), I_i , I_g , t_g .

Settings via the release display menu

The ETE-M release provides setting of additional motor protections I_{os} , t_{os} , I_{uc} , t_{uc} , ϵI and the neutral protection setting level 50%/100% via the display menu.

DIP switch settings

a) Selection of the setting mode: the «remote» position is for settings (setpoints) configured via the communication bus with the Modbus RTU protocol, the «manual» position is for settings set locally on the protection release panel.

b) Selecting the neutral protection mode

For 4-pole circuit breakers, a choice of neutral protection setting level of 50% or 100% of the phase setting is available.

c) Activation and deactivation of additional protections against delayed start, minimum current or phase imbalance/breakage for the ETE-M release.

Trigger log

The ETA and ETE protection releases store information about the last 10 emergency triggers of protection functions, including the type of protection that triggered, the current and the trigger time.

Protection indicators

The ETA and ETE protection releases have indicators of the main protection functions I_r , I_{sd}/I_i , I_g , which display the status of protections and their operation. There is also an I_{ro} indicator for pre-emergency indication of overload when the current exceeds 90% of the I_r setting.

Fault trigger indicator

If power is available at the release and emergency triggering occurs, the indicator will display the trigger status.

Test and readout connector

The protection releases have a Test connector, using which the ET TEST testing unit can be connected to read setpoint and last trigger data, configure additional protection functions, and test the operation of the circuit breaker and protection release.

Operation statistics

The ETE release, when communicating via Modbus RTU, can transmit statistics on the number of activation/deactivation operations, emergency triggering and operating time.

Load profile

The ETE release, when communicating via Modbus RTU, can transmit load profile data in hours for different load levels as a percentage of the nominal value.

Historical operating data

ETA-COM and ETE releases, when communicating via Modbus RTU, can transmit historical data on maximum/minimum values of currents/voltages and power (for ETE).

Measuring network parameters

ETA releases measure current values, while ETE releases are also capable of measuring voltages, powers, energies, frequencies, harmonics and other network parameters. Data can be read via the release display, external ET HMI display or remotely using Modbus RTU communication.

Communication and control connector

The ETA-COM and ETE releases have a connector and a built-in module for remote communication and control via the Modbus RTU protocol.

► Display functions

Protection release display

ETA (sizes T250, T400, T630) and ETE protection releases have a built-in LCD display.

The display can be used to read: data of measured network parameters, trigger log data, active protection settings, circuit breaker status, information about the type and version of the protection release.

The display can be used to configure: additional protection, communication settings.

Measured network parameters and measurement accuracy

Parameter		Measurement range with accuracy	Accuracy		
			ETA	ETE	
Currents	I_1, I_2, I_3, I_N	(0,2In ~ 1,2In) A	±5%	±1,5%	
	I_g			±2,5%	
Current consumption	I_1, I_2, I_3, I_N	(0,2In ~ 1,2In) A	-	±1,5%	
Fundamental harmonic current	$I_{1-1}, I_{2-1}, I_{3-1}, I_{N-1}$	(0,2In ~ 1,2In) A	-	±1,5%	
Current imbalance	ϵI	0 ~ 100 %	-	±5%	
Stresses	Linear (U_{12}, U_{23}, U_{31})	50 V ~ 690 V	-	±0,5%	
	Phase (U_{1N}, U_{2N}, U_{3N})	30 V ~ 400 V	-		
Fundamental harmonic voltage	Linear ($U_{12-1}, U_{23-1}, U_{31-1}$)	50 V ~ 690 V	-	±0,5%	
	Phase ($U_{1N-1}, U_{2N-1}, U_{3N-1}$)	30 V ~ 400 V	-		
Voltage imbalance	$\epsilon U, \epsilon V$ (phase/line)	0 ~ 100 %	-	±5%	
Power	Active, reactive, complete	P	-3000 kW ~ -3 kW; 3 kW ~ 3000 kW	-	±2,5%
		Q	-3000 kVAR ~ -3 kVAR; 3 kVAR ~ 3000 kVAR	-	
		S	3 kBA ~ 3000 kBA	-	
	Fundamental harmonic power	P_{fund}	-3000 kW ~ -3 kW; 3 kW ~ 3000kW	-	±2,5%
		Q_{fund}	-3000 kVAR ~ -3 kVAR; 3 kVAR ~ 3000 kVAR	-	
		S_{fund}	3 kVA ~ 3000 kVA	-	
	Power consumption	P	3 kW ~ 3000 kW	-	±2,5%
		Q	3 kVAR ~ 3000 kVAR	-	
	S	3 kVA ~ 3000 kVA	-		

Parameter			Measurement range with accuracy	Accuracy	
				ETA	ETE
Power factor	PF		-1.00 ~ -0,50 0,50 ~ 1,00	-	±2,5%
Energy	E.P		1 kWh ~ 1000 TWh	-	±2,5%
	E.Q		1 kVarh ~ 1000 TVArh	-	
	E.S		1 kWh ~ 1000 TWh	-	
Frequency			45 Hz ~ 65 Hz	-	±0,1 Hz
Total harmonic distortion (1 to 31 harmonics)	Current	THDi	0 ~ 100%	-	±5%
	Stress	THDu	0 ~100%	-	±5%

► Communication, dispatching and control via the Modbus RTU protocol

The standard scope of supply of OptiMat T circuit breakers with ETA-COM, ETA-M-COM, ETE and ETE-M electronic releases includes a built-in data transmission module using the Modbus RTU protocol.

This capability allows OptiMat T circuit breaker to be integrated into local or remote monitoring, dispatching, control and management systems to improve the efficiency and reliability of electrical plant operation.

The standard scope of supply of OptiMat T circuit breakers with ETA-COM, ETA-M-COM, ETE and ETE-M releases also includes an installed electronic circuit breaker status contact for remote dispatching of circuit breaker closed/open states and emergency triggering. Available capabilities of protection releases: network parameter measurements, reading and setting protection settings, monitoring statuses and operating information about the statistics, history in the trigger log maximize the efficiency of circuit breaker when organizing communication via the Modbus RTU protocol.

In addition, due to the integrated design, OptiMat T circuit breaker can be controlled by remote activation/deactivation commands via the ESMO motor drive.

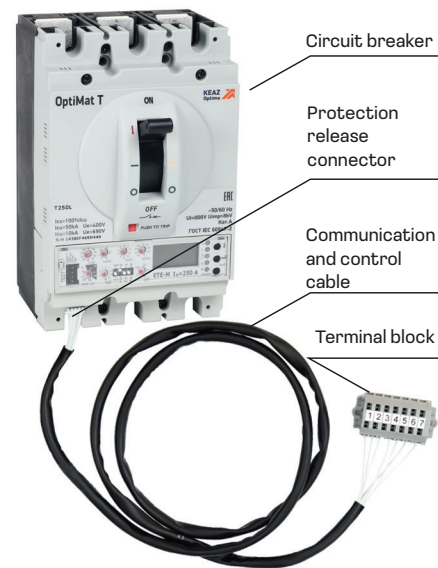
Basic parameters of communication via the Modbus RTU protocol:

- Communication protocol/interface: Modbus RTU/RS-485;
- Data transfer rate: 19200 bps by default (1200, 2400, 4800, 9600, 38400 bit/sec are also available);
- Device address: 1-247;
- Number of devices in the bus: up to 32 devices, line length up to 1200 m;
- Format: one start bit, eight data bits, two stop bits, even parity (no parity, odd parity);
- Power supply: auxiliary power 24VDC (3W).

Modbus RTU interface in OptiMat T circuit breaker

To connect OptiMat T circuit breaker to systems using the Modbus RTU protocol, the standard scope of supply of circuit breaker with ETA-COM, ETA-M-COM, ETE and ETE-M protection releases includes a communication and control cable (cable length 0.5 m). The communication cable is connected to a special connector in the protection release. On the reverse side, the cable is equipped with a terminal block for connecting power supply and user communication circuits.

OptiMat T circuit breaker also have an integrated capability for remote control of activation and deactivation of the circuit breaker using commands to the ESMO motor drive via the Modbus RTU protocol. This requires the use of a special communication and control cable ESMO-COM. The special ESMO-COM cable is similar to the standard communication cable, but has additional terminals with outputs for controlling OptiMat T circuit breaker.



Terminal	Connection
1	Power input DC24V(-)
2	Power input DC24V(+)
3	Data reception/transmission (A+)
4	Data reception/transmission (B-)
5	Not used
6	Not used
7	Not used

Terminal	Connection
-	Power input DC24V(-)
+	Power input DC24V(+)
A	Data reception/transmission (A+)
B	Data reception/transmission (B-)
S1	Common control output to ESMO drive
S2	Output of ON command to ESMO drive
S4	Output of OFF command to ESMO actuator

Capabilities available via Modbus RTU protocol and ET HMI display

Functionality	Parameter	Release	
		ETA-COM ETA-M-COM	ETE ETE-M
Measurements	Currents	√	√
	Stresses	-	√
	Power, energy, power factor	-	√
	Frequency	-	√
	Voltages, phase sequence	-	√
	Harmonic current distortion THDi	-	√
	Harmonic distortion of voltage THDu	-	√
Measurement history	Maximum and minimum currents	√	√
	Maximum and minimum voltages	-	√
	Maximum and minimum power, frequency, power factor	-	√
	Time stamp for minimum and maximum values	-	√
Setting and setpoint reading functions	Local/remote setting mode	√	√
	Setting up setpoints of the main protections and operating modes	√	√
	Setting additional protection setpoints	-	√
	Reading protection setpoints	√	√
Diagnostics and monitoring of states	Remote control of switch status (ON/OFF, TRIGGERED)	√	√
	Emergency and pre-emergency signals of protection functions	√	√
	Detailed log of emergency operations	√	√
	Trigger time stamp	-	√
Operating data and information	Number of alarm activations and emergency triggers	-	√
	Operation time	-	√
	Terminal wear, durability	-	√
	Loading profile	-	√
	Device information: type, rating, version, number of poles	√	√
	Communication parameters: address, speed, parity	√	√
Control	Switch closing/opening control	√	√
	Communication parameter setting	√	√
	Time and date setting	-	√
	Data output, setup, control via ET HMI door display	√	√

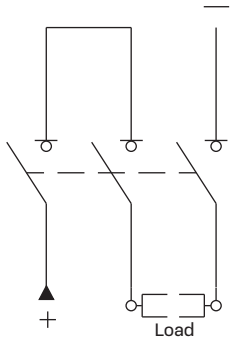
OptiMat T switch-disconnectors

OptiMat T SD version switch-disconnectors are switching devices built on the basis of the corresponding standard-size circuit breakers, therefore they have the same overall and connection dimensions, mounting and installation design, and can also be equipped with standard accessories.

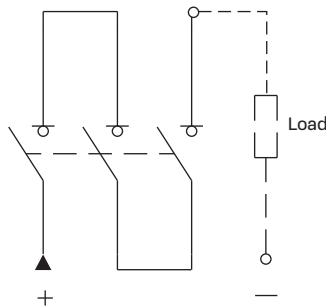
OptiMat T-SD switch-disconnectors comply with the GOST IEC 60947-3 standard and have application categories AC-22/23A, DC22/23A for alternating and direct current.

► DC wiring diagrams

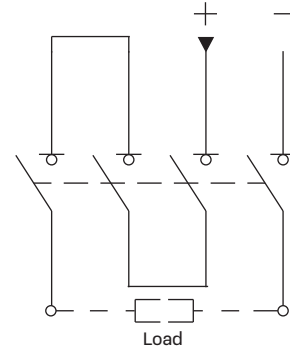
Connection type A



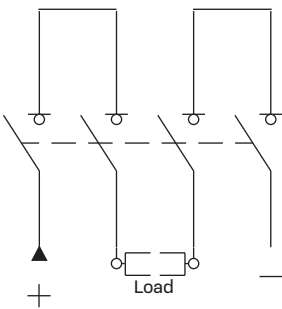
Connection type B



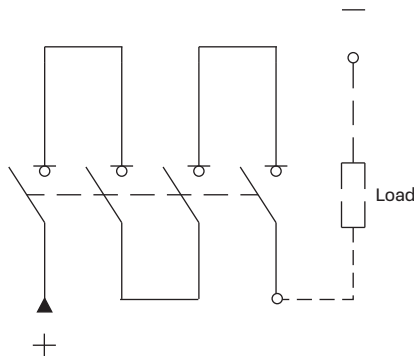
Connection type C



Connection type D



Connection type E



Rated operating voltage	Connection diagram							
	Isolated polarities			Grounded negative polarity				Grounded midpoint
DC500V	A	-	-	A	B	-	-	-
DC750V	A	C	D	-	B	C	E	D
DC1000V	-	C	D	-	-	-	E	D

► OptiMat T Accessories

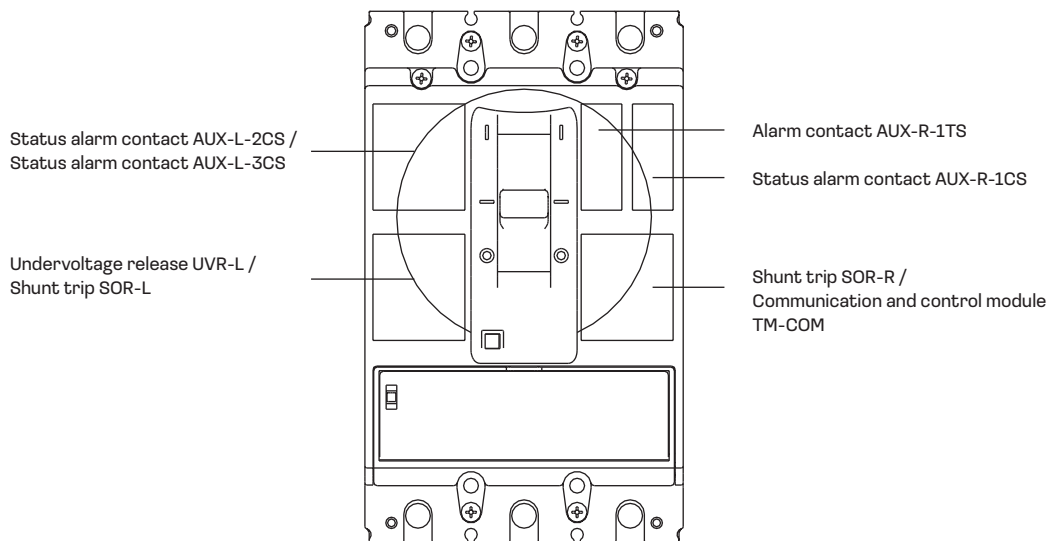
OptiMat T circuit breaker can be equipped with a wide range of mechanical, electrical and electronic accessories. Accessories allow for the implementation of various solutions to increase efficiency, safety and ease of operation, simplify installation, commissioning and maintenance.

OptiMat T circuit breaker can be equipped with various combinations of internal electrical and electronic accessories for indication and control. Additional contacts and control relays are equipped in the standard version with connected marked wires 1.5 m long for convenient connection of external circuits inside the low-voltage switchgear.

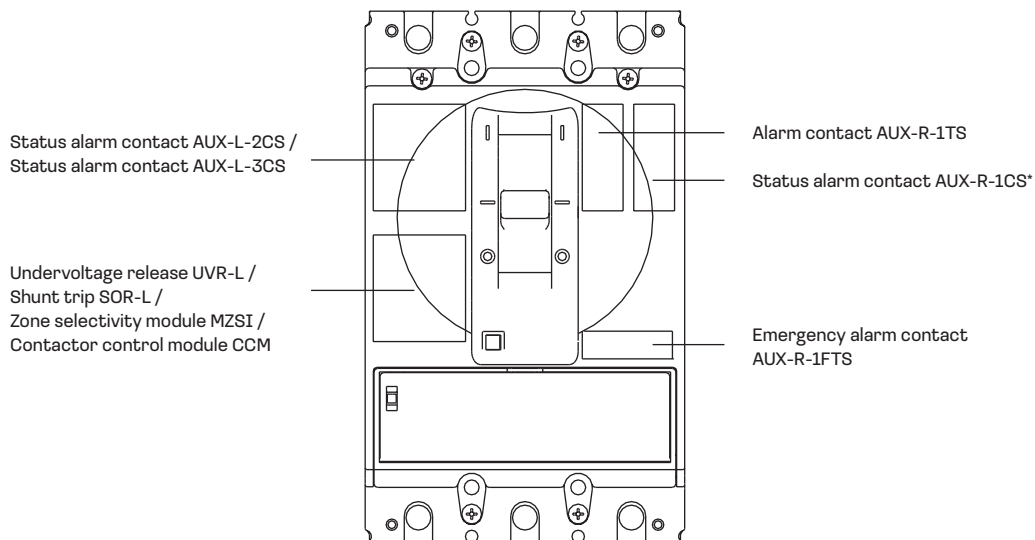
Location of electrical accessories inside OptiMat T circuit breaker

Circuit breaker with thermomagnetic releases: OptiMat T125, T160, T250, T400, T630

Switch-disconnectors: OptiMat T125-SD, T250-SD, T400-SD, T630-SD



Circuit breaker with electronic releases: OptiMat T125, T160, T250, T400, T630



* The AUX-R-1CS status alarm contact is not installed in circuit breakers with ETA-COM protection releases. ETA-M-COM, ETE and ETE-M.

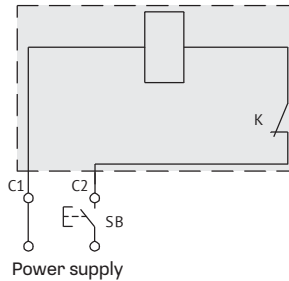
Additional relays

OptiMat T circuit breaker can be equipped with additional relays – a shunt trip and an undervoltage release to enable electrical disconnection of the circuit breaker.

Shunt trip SOR

Ensures that the OptiMat T circuit breaker is disabled when control voltage is applied.
The SOR shunt trip is equipped with a limit contact that removes power from the coil when the circuit breaker is opened.

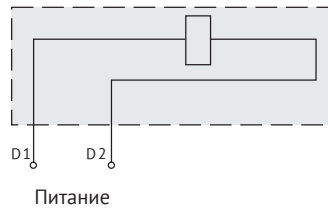
OptiMat T shunt trip are available in 2 versions:
– SOR-L version for installation in the left slot of all versions of the switch with thermomagnetic and electronic releases;
– SOR-R version for installation in the right slot of the switch, only for designs with a thermomagnetic release.
For OptiMat T circuit breakers, SOR shunt trips are available with different AC and DC control voltage versions. Operating voltage range from 70% to 110% U_n .



Shunt trip type	Circuit breaker standard size	Power consumption					
		AC50/60Hz, VA			Direct current, W		
		110~127 VAC	220~254 VAC	380~440 VAC	24 VDC	110~127 VDC	220~250 VDC
SOR-L T125-T160 SOR-R T125-T160	T125/T160	<80	<80	<80	<50	<80	<80
SOR-L T250-T400-T630 SOR-R T250-T400-T630	T250/T400/T630	<80	<80	<80	<50	<80	<80

Undervoltage release UVR

Ensures the OptiMat T circuit breaker disconnection when there is no voltage or when the voltage on the UVR release is reduced.
UVR triggering and circuit breaker opening occur in the voltage range from 70% to 35%.
Re-closing of the circuit breaker is possible when the voltage on the relay is higher than 85% U_n . The undervoltage release is installed in the left slot of the OptiMat T circuit breaker.



Type of undervoltage release	Circuit breaker standard size	Power consumption	
		220~254 VAC	380~440 VAC
UVR-L T125-T160	T125/T160	<5	<5
UVR-L T250-T400-T630	T250/T400/T630	<5	<5

Auxiliary contacts

OptiMat T circuit breaker can be equipped with additional contacts to indicate the circuit breaker status.
Several types of auxiliary contacts are available to indicate different states:
– AUX-CS for indicating the circuit breaker status (closed/open);
– AUX-TS for indicating circuit breaker triggering (middle position triggered for any reason);
– AUX-FTS for indicating emergency triggering of the circuit breaker (triggering by the protection release).

AUX-CS status signaling contacts

For indicating the state of the circuit breaker power contacts – closed/open.
Several versions of changeover status contacts are available depending on the installation location in the OptiMat T circuit breaker and the number of contacts:
– contacts in the left slot of the AUX-L-CS circuit breaker have versions with two AUXL-2CS or three contacts AUX-L-3CS;
– contact in the right slot of the AUX-R-1CS circuit breaker has one contact (the contact is not installed in circuit breakers with ETA-COM protection releases. ETA-M-COM, ETE and ETE-M).



Contactor type	Circuit breaker standard size	Installation site	Connection diagram
AUX-L-2CS T125-T160	T125/T160	Left slot	
AUX-L-2CS T250-T400-T630	T250/T400/T630	Left slot	
AUX-L-3CS T125-T160	T125/T160	Left slot	
AUX-L-3CS T250-T400-T630	T250/T400/T630	Left slot	
AUX-R-1CS T125-T160	T125/T160	Right slot	
AUX-R-1CS T250-T400-T630	T250/T400/T630	Right slot	

AUX-TS Alarm contact

To indicate the circuit breaker trigger position (middle position of the handle). Indicates that the circuit breaker has triggered for any of the following possible reasons: triggering of the protection release, triggering by means of a shunt trip or undervoltage release, triggering of the leakage current protection unit, pressing of the test button or manual pressing of the emergency trigger button on the motor drive. The AUX-R-1TS switching contact is installed in the right slot of the circuit breaker.

Contactor type	Circuit breaker standard size	Installation site	Connection diagram
AUX-R-1TS T125-T160	T125/T160	Right slot	
AUX-R-1TS T250-T400-T630	T250/T400/T630	Right slot	



Emergency alarm contact AUX-FTS

To indicate emergency shutdown of the circuit breaker due to the operation of the protection functions of the electronic protection release. The AUX-R-1FTS emergency alarm contact is installed in a special right slot of the OptiMat T circuit breaker with an electronic release.

Contactor type	Circuit breaker standard size	Installation site	Connection diagram
AUX-R-1FTS T125-T160-T250-T400-T630	T125/T160/T250/T400/T630	Right slot	

Characteristics of AUX-CS, AUX-TS и AUX-FTS contacts

Rated thermal current I _{th} (A)	Operating current according to utilization category I _e (A)		
	AC250V/AC-15	AC400V/AC-15	DC220V/DC-13
3	3	0,3	0,15



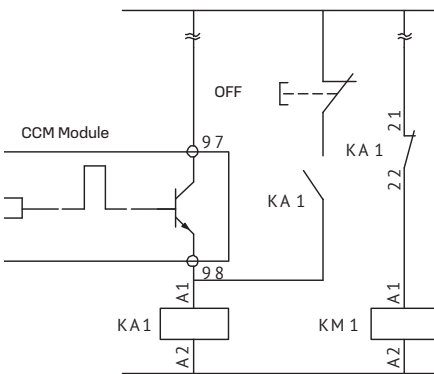
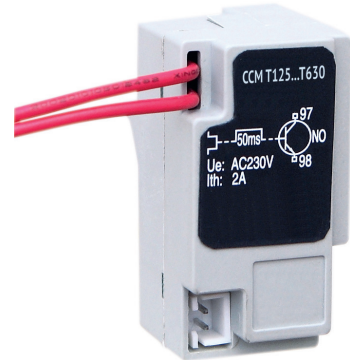
Additional modules for OptiMat T circuit breaker with electronic protection releases

OptiMat T circuit breakers with electronic releases can be equipped with additional internal modules to expand the capabilities of the release.

Contactor control module CCM

Used with ETA-M, ETA-M-COM and ETE-M motor protection releases.

When overload, phase imbalance/loss, rotor jam, extended starting or undercurrent protection is activated, the release sends a trigger command to the contactor via the CCM contactor control module. If the contactor is not disabled within 200 ms, the protection release causes the circuit breaker to trigger. This improves coordination, preserves resources and ensures the possibility of restarting the engine. The CCM contactor control module is installed in the left circuit breaker slot.

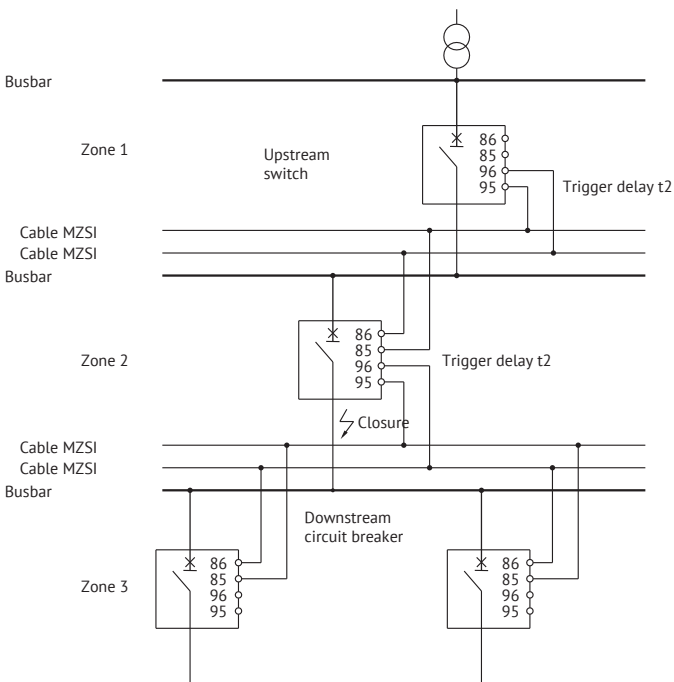
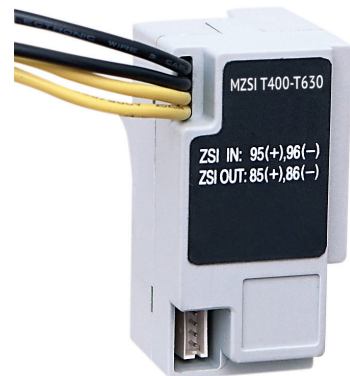


KM1—contactor control coil,
KA1—auxiliary relay

Zone selectivity module MZSI

Used with ETA, ETA-COM and ETE protection releases of OptiMat T400-T630 standard sizes to ensure protection coordination and zone selectivity. Downstream and upstream circuit breakers are connected with MZSI modules using wires. When the selective short-circuit or ground fault protection is activated, the release sends a delayed triggering signal to the upstream circuit breaker and simultaneously checks if there is a similar signal from the downstream devices. If there is no signal from the downstream units, the release is triggered in accordance with the set delay; if there is a signal, the release is not triggered during the selectivity delay time.

The zone selectivity module MZSI is installed in the left slot of the circuit breakers.



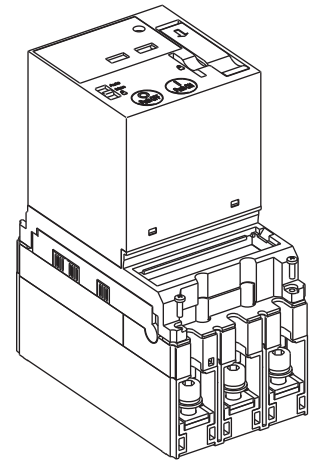
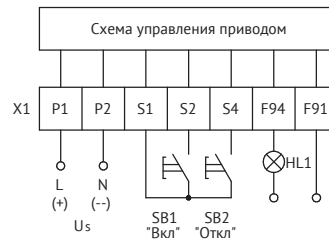
Motor drive ESMO

The ESMO motor drive enables automatic and remote control of closing and opening of OptiMat T circuit breakers.

Due to the system for energy storage during deactivation, the ESMO motor drive ensures convenient and quick closing and opening of the circuit breaker both manually using control buttons and by electric commands.

The drive has 2 control modes:

- In manual mode, the user can manually operate the motor drive and circuit breaker. The control buttons are used for activation and activation, and the pumping lever is used to arm the spring. In manual mode, the possibility of electrical control of the drive is disabled;
- In automatic mode, the circuit breaker can be controlled by electrical commands, both pulse and constant. In this case, manual activation of the circuit breaker using the buttons on the drive is disabled. The ESMO motor drive is equipped in the standard configuration with a padlock to lock it in the disabled state (the padlock is supplied by the customer). The ESMO motor drive is also equipped with a contact to signal manual/automatic operation mode.



Drive type	Current consumption, A		Power, W	Maximum number of on/off cycles per hour
	A10 VAC, 230VAC, 110 VDC, 220 VDC	24VDC		
ESMO T125-T160	≤0,5	≤3	20	60
ESMO T250				
ESMO T400-T630	≤3	≤5	90	60

Note – The operating supply voltage range is from 85% to 110% of the nominal voltage.

Drive type	Activation time, s	Deactivation time, s	Reset time, s	Minimum duration of control signal for activation and deactivation, s
ESMO T125-T160	< 0,08	< 1,5	3	> 0,15
ESMO T250				
ESMO T400-T630	< 0,1			

Note – triggering time at nominal voltage is given.

Panel door display ET HMI

The ET HMI display is connected via Modbus RTU to OptiMat T circuit breakers with ETA-COM, ETA-M-COM, ETE and ETE-M releases. The display is installed on the panel door, can be connected to one release and provides a wide range of options:

- display on a large screen all of information available in the protection release (measurements, settings, trigger log);
- circuit breaker status display;
- display of emergency and pre-emergency conditions;
- setting protection parameters and setpoints;
- control of the circuit breaker - closing and opening by commands to the ESMO motor drive (separate use of a special ESMO-COM data and control connector is required);
- communication with an external dispatching system via the Modbus RTU protocol).



Test unit ET TEST

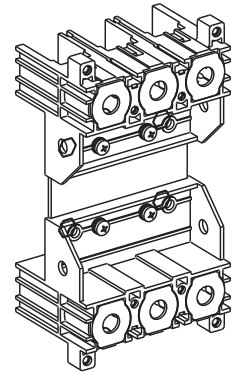
The ET TEST testing unit is a special compact external device for displaying the available information, setting and testing the triggering of the ETN, ETN-M, ETA, ETA-M, ETA-COM, ETA-M-COM, ETE and ETE-M protection releases of OptiMat T circuit breakers. The ET TEST testing unit is connected to the TEST connector of the protection release using a special cable with a connector, which is included in the standard scope of supply of the unit.

Using the ET TEST unit, additional protection functions can be configured, enabled or disabled.



Plug-in kit PMP/PFP

OptiMat T125-T160-T250-T400-T630 circuit breaker can be converted to plug-in type using an additional kit. The PMP/PFP plug-in kit includes parts to convert the OptiMat T fixed circuit breaker into a plug-in moving part, as well as a plug-in type fixed part with universal terminals that can be installed by the user with either front or rear connection, with vertically or horizontally oriented rear terminals.



Drawout kit WMP/WFP

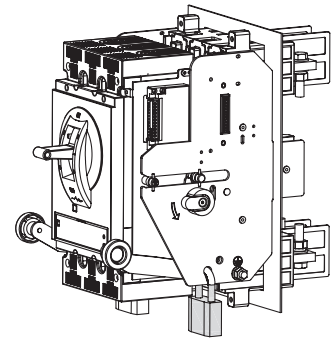
OptiMat T400-T630 circuit breaker can be converted to withdrawable version using an additional kit. The WMP/WFP drawout kit includes parts for converting a fixed OptiMat T circuit breaker into a withdrawable version movable part, as well as a withdrawable version fixed part.

There are 2 versions of the kits available depending on the type of terminals of the fixed part:

- set with fixed part and front connection terminals;
- a kit with a fixed part and rear connection terminals that can be oriented vertically or horizontally by the user.

The standard scope of supply of the drawout kit includes contacts for signaling the circuit breaker position in the fixed part, plugged in/withdrawn state, as well as a set of connectors for automatic connection/disconnection of secondary circuits when plugging in/withdrawing.

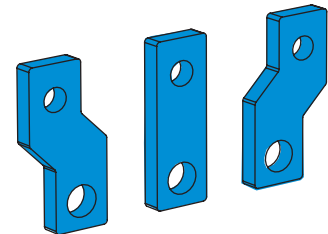
The withdrawable circuit breaker can be locked in the withdrawn position with a padlock (the lock is supplied by the customer).



Expanded terminals EST

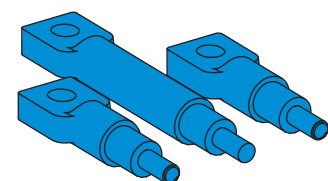
For ease of connection of conductors to the power terminals of fixed OptiMat T circuit breaker, additional expanded EST terminals can be used. These expanded terminals allow for quick and easy connection of large cross-section cables or busbars to circuit breaker terminals.

Expanded terminals are supplied in sets of 6 or 8 pieces and are also standardly equipped with long inter-pole partitions.



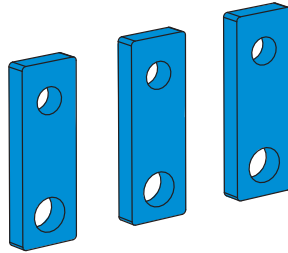
Rear terminals ERT

The ERT rear terminals allow for rear connection of power conductors to the OptiMat T circuit breaker terminals. The orientable of rear terminals is adjustable, and they can be arranged vertically or horizontally. The rear terminals are supplied in sets of 6 or 8 pieces, and their standard scope of supply also includes terminal covers for rear connection, which provide additional insulation of the circuit breaker terminals.



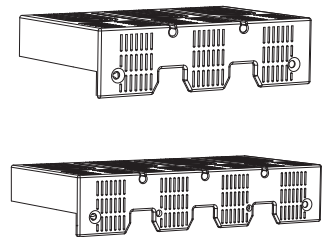
Extended terminals EET

The EET extended terminals provide greater convenience of connecting power conductors to the terminals of OptiMat T circuit breaker. The extended terminals are supplied in sets of 6 or 8 pieces, and their standard scope of supply also includes long interphase partitions.



Low covers for power terminal L-TC

Provides additional insulation when connecting the front and rear terminals of OptiMat T stationary circuit breaker. L-TC terminal covers are supplied in sets of 2 pcs.



External rotary handle RH-E

Allows you to control the activation and deactivation of OptiMat T circuit breaker from the panel door using a convenient large ergonomic handle. The standard scope of supply of the handle includes locking in the disabled position using padlocks (padlocks are supplied by the customer). The handle also ensures that the door cannot be opened when the circuit breaker is enabled.

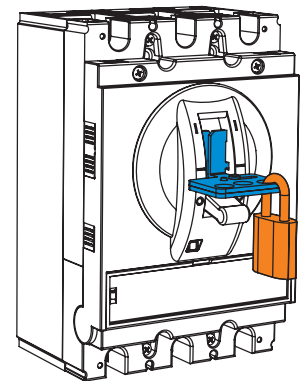
To use the rotary handle, order:

- rotary handle RH-E, which includes a base for the circuit breaker and the actual handle for the door;
- rod for portable rotary handle RH-E-S, 500 mm long.



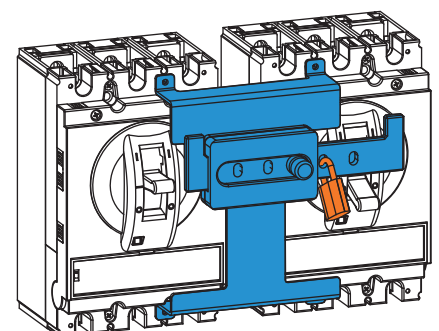
Handle locking in «off» state PLL

Allows for mechanical locking of the circuit breaker in the disabled state using up to three padlocks with a shackle diameter of 5-8 mm (padlocks are supplied by the customer).



Mutual mechanical lever locking PLIL

The lock is installed on the control levers of adjacent OptiMat T circuit breaker and mechanically prevents the possibility of simultaneous activation of two circuit breaker using a padlock with a shackle diameter of 3-5 mm (the padlock is supplied by the customer).



► Technical specification OptiMat T

Specifications should be taken into account when installing OptiMat T circuit breaker in switchgear, selecting designs, and in operation.

Dependence of the operating current of fixed circuit breakers with electromagnetic, electronic protection release and switch-disconnectors on the ambient air temperature

Configuration	Ambient temperature						
	+40 °C	+45 °C	+50 °C	+55 °C	+60 °C	+65 °C	+70 °C
OptiMat T125	$1,0 \cdot I_n$	$1,0 \cdot I_n$	$1,0 \cdot I_n$	$0,97 \cdot I_n$	$0,95 \cdot I_n$	$0,92 \cdot I_n$	$0,90 \cdot I_n$
OptiMat T160	$1,0 \cdot I_n$	$1,0 \cdot I_n$	$1,0 \cdot I_n$	$0,97 \cdot I_n$	$0,95 \cdot I_n$	$0,92 \cdot I_n$	$0,90 \cdot I_n$
OptiMat T250	$1,0 \cdot I_n$	$1,0 \cdot I_n$	$1,0 \cdot I_n$	$0,97 \cdot I_n$	$0,95 \cdot I_n$	$0,89 \cdot I_n$	$0,86 \cdot I_n$
OptiMat T400	$1,0 \cdot I_n$	$1,0 \cdot I_n$	$1,0 \cdot I_n$	$0,96 \cdot I_n$	$0,93 \cdot I_n$	$0,92 \cdot I_n$	$0,90 \cdot I_n$
OptiMat T630	$1,0 \cdot I_n$	$1,0 \cdot I_n$	$1,0 \cdot I_n$	$0,96 \cdot I_n$	$0,93 \cdot I_n$	$0,89 \cdot I_n$	$0,86 \cdot I_n$

Dependence of electrical characteristics of circuit breakers and switch-disconnectors on altitude above sea level when installed at an altitude of over 2000 m

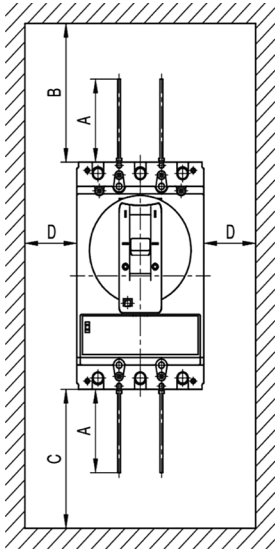
Elevation ASL, m		2000	2500	3000	4000	4500	5000
Withstand voltage of frequency 50/60 Hz, V	Ui=1000 V	3500	3500	3150	2700	2500	2200
	Ui=800 V	3000	3000	2500	2200	2100	2000
Insulation voltage, V	Ui=1000 V	1000	1000	900	780	730	670
	Ui=800 V	800	800	720	630	580	530
Maximum operating voltage, V	Ui=1000 V	690	690	620	540	500	460
	Ui=800 V	690	690	620	540	500	460
Current derating factor		1	1	0,98	0,95	0,94	0,93

Power losses

Standard size	Rated current, A	Power losses (W/pole)		
		Front terminals	Rear terminals	Plugin/withdrawable design
T125 TM, M	125	7,9	9	10,3
T125 ETN, ETA, ETE		4,9	5,5	7,3
T160 TM, M	160	11,7	13,3	15,6
T160 ETN, ETA, ETE		8,6	9,8	12,5
T250 TM, M	250	16,1	18,3	25,6
T250 ETN, ETA, ETE		15,6	17,8	25,2
T400 TM, M	400	22,1	25,2	29,6
T400 ETN, ETA, ETE		24,4	27,8	32,9
T630 TM, M	630	46,8	53,4	65,4
T630 ETN, ETA, ETE		51,8	59,1	73

► Required insulation distances for installation of OptiMat T circuit breakers and switch-disconnectors in a metal compartment and requirements for using protection depending on the circuit breaker size and the type of terminals

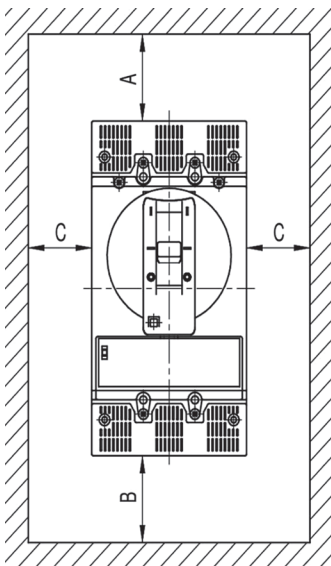
Insulation distances for OptiMat T circuit breakers with front terminals and phase barriers (terminal covers for the HV version)



Standard size	U ≤ 440 V				440 V < U ≤ 690 V			
	A	B	C	D	A	B	C	D
OptiMat T125-T160	50	50	50	10	50	60	60	25
OptiMat T250	50	50	50	10	50	60	60	25
OptiMat T400-T630	107,5	107,5	107,5	10	107,5	117,5	117,5	25
OptiMat T125-RC	50	50	50	10	-	-	-	-
OptiMat T250-RC	50	50	50	10	-	-	-	-
OptiMat T400-T630-RC	107,5	107,5	107,5	10	-	-	-	-

Standard size	U ≤ 1000 V			
	A	B	C	D
OptiMat T250-HV	100	200	200	27,5
OptiMat T400-T630-HV	107,5	110	110	30

Insulation distances for OptiMat T circuit breakers with rear terminals and terminal covers

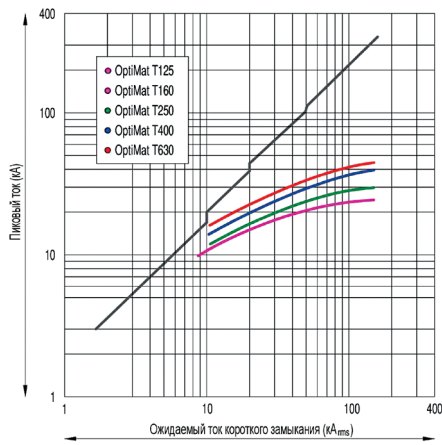


Standard size	U ≤ 440 V			440 V < U ≤ 690 V		
	A	B	C	A	B	C
OptiMat T125-T160	26,5	26,5	10	36,5	36,5	25
OptiMat T250	26,5	26,5	10	36,5	36,5	25
OptiMat T400-T630	24,5	24,5	10	85	85	25
OptiMat T125-RC	26,5	26,5	10	-	-	-
OptiMat T250-RC	26,5	26,5	10	-	-	-
OptiMat T400-T630-RC	24,5	24,5	10	-	-	-

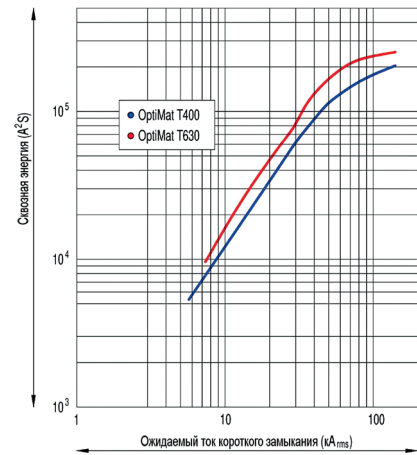
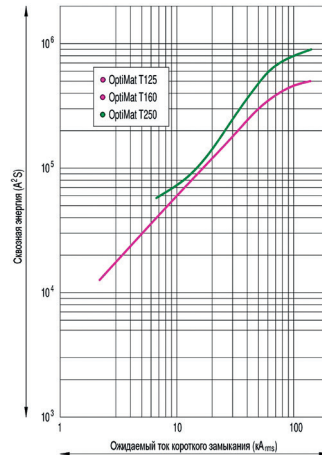
► Table of selective coordination of OptiMat T circuit breaker

Superior		T250	T400	T630	
Subordinate	Icu version	L, M, H, S, V, R	L, M, H, S, V, R	L, M, H, S, V, R	
	Release	ETA, ETE			
		In, A	250	400	630
T125	L, M, H, S	16-125	3	T	T
T160	L, M, H, S	160	3	T	T
T250	L, M, H, S, V, R	32-250		T (85kA)	T (100kA)
T400	L, M, H, S, V, R	250-400			7
T630	L, M, H, S, V, R	500-630			

► Current limiting characteristics of OptiMat T circuit breaker

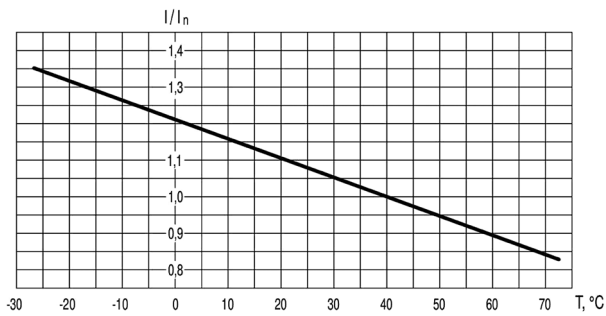


► Let-through energy characteristics of OptiMat T circuit breaker

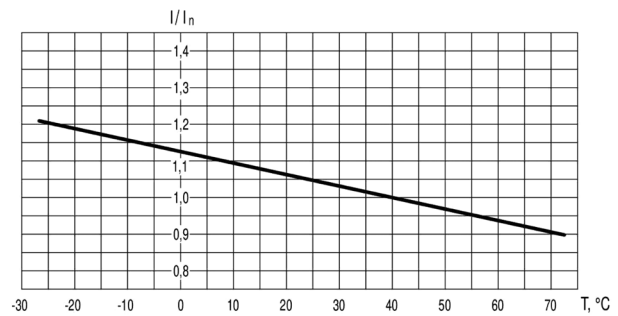


► Dependence of the operating current of circuit breakers with thermomagnetic releases on the ambient temperature

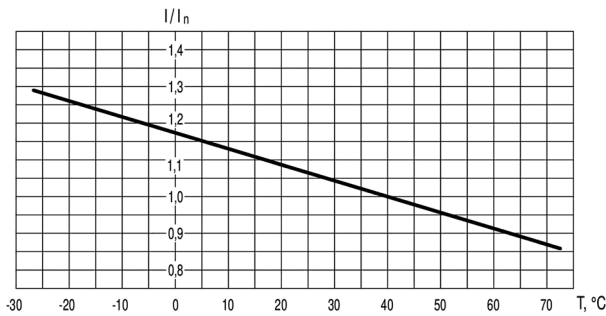
Dependence of the operating current of OptiMat T125 and T160 circuit breakers with TM and TM-M type thermomagnetic releases on the ambient temperature



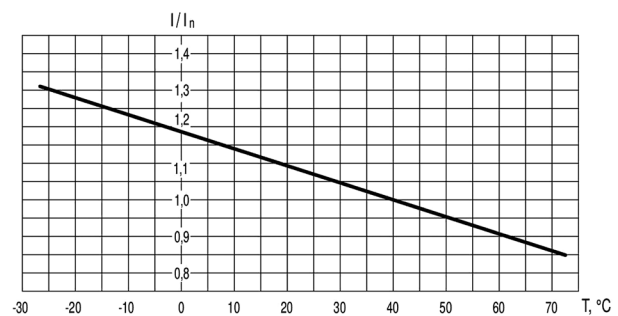
Dependence of the operating current of OptiMat T250 circuit breakers with TM and TM-M type thermomagnetic releases on the ambient temperature



Dependence of the operating current of OptiMat T400 circuit breakers with TM and TM-M type thermomagnetic releases on the ambient temperature

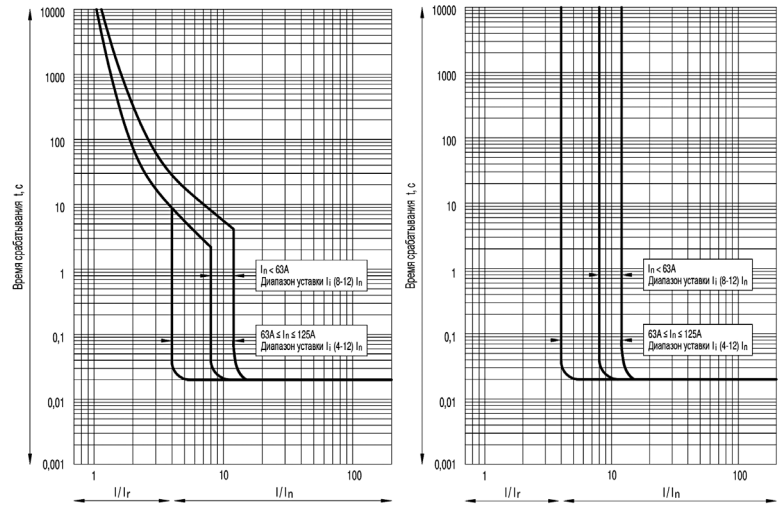


Dependence of the operating current of OptiMat T630 circuit breakers with TM and TM-M type thermomagnetic releases on the ambient temperature

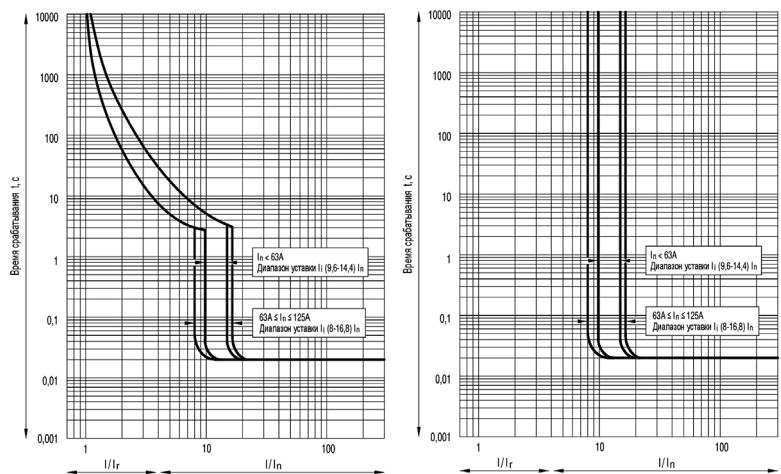


► **Current and time characteristics of thermomagnetic and electromagnetic protection releases**

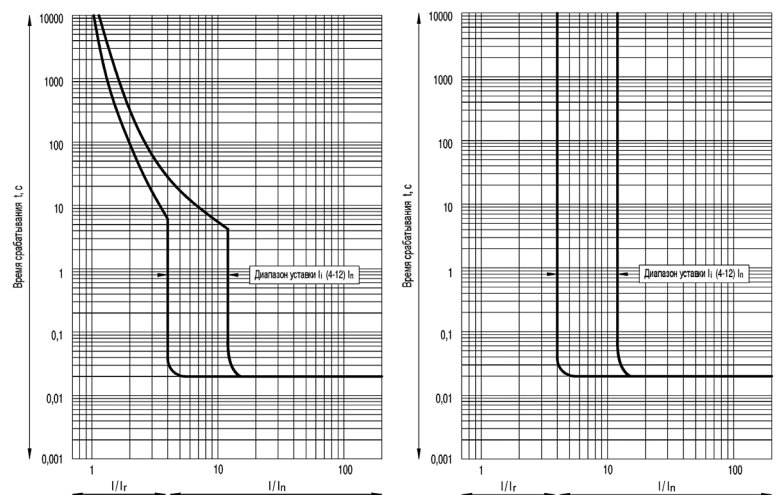
Current and time characteristics of OptiMat T125 circuit breakers with thermomagnetic adjustable releases of the TM type for protection of distribution networks and with electromagnetic adjustable releases of the M type for protection of distribution networks.



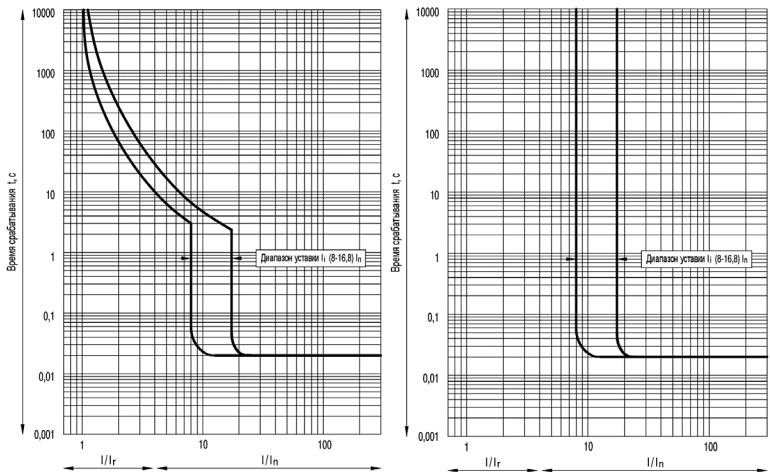
Current and time characteristics of OptiMat T125 circuit breakers with thermomagnetic adjustable releases of the TM-M type for protection of electric motors and with electromagnetic adjustable releases of the M-M type for protection of electric motors.



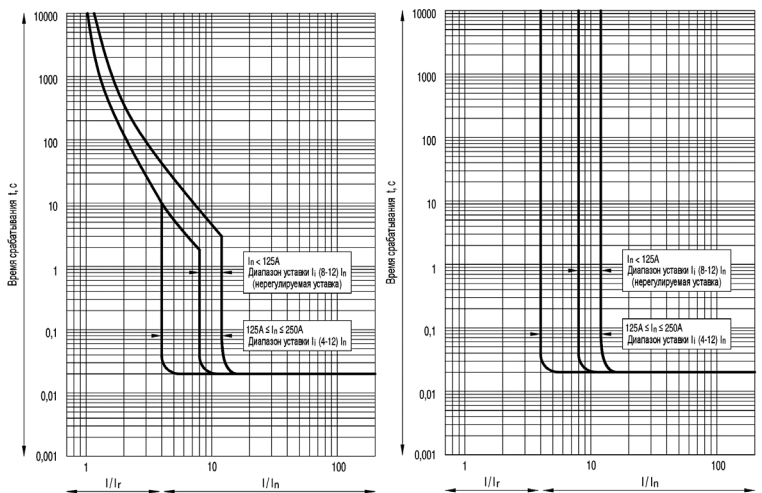
Current and time characteristics of OptiMat T160 circuit breakers with thermomagnetic adjustable releases of the tm type for protection of distribution networks and with electromagnetic adjustable releases of the m type for protection of distribution networks.



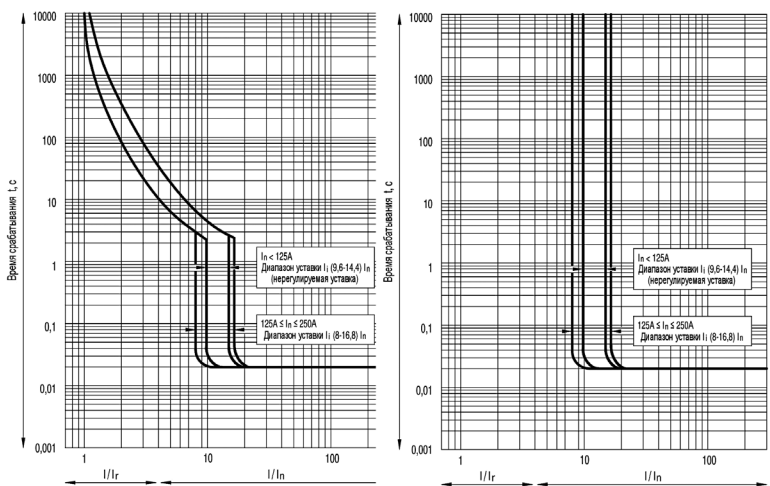
Current and time characteristics of OptiMat T160 circuit breakers with thermomagnetic adjustable releases of the TM-M type for protection of electric motors and with electromagnetic adjustable releases of the M-M type for protection of electric motors



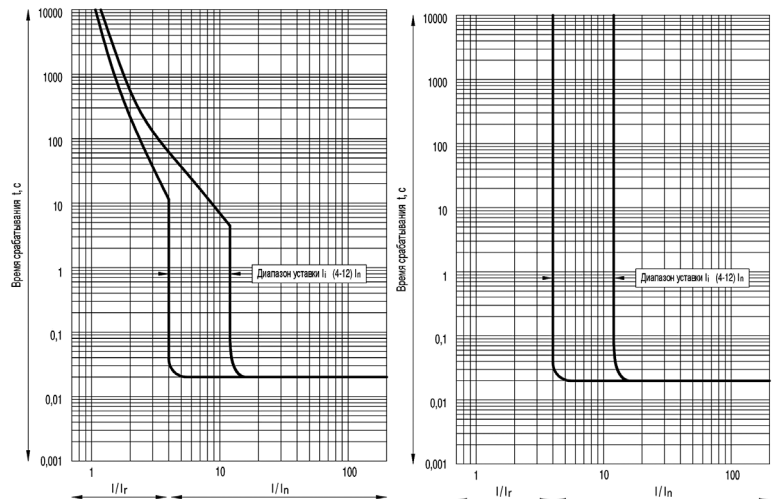
Current and time characteristics of OptiMat T250 circuit breakers with thermomagnetic adjustable releases of the TM type for protection of distribution networks and with electromagnetic adjustable releases of the M type for protection of distribution networks



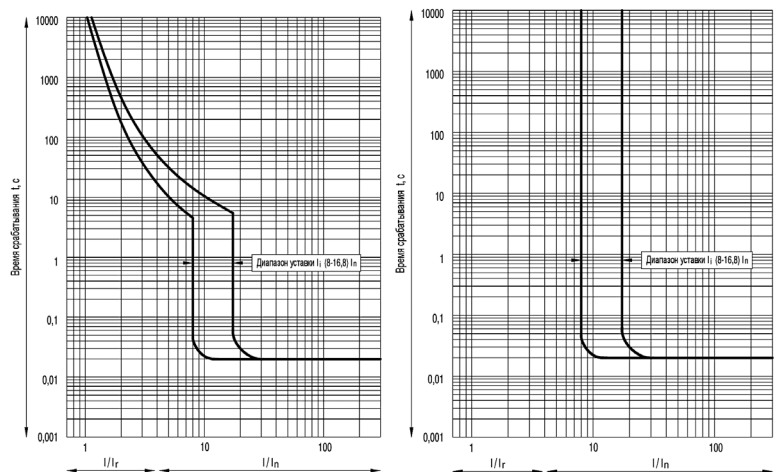
Current and time characteristics of OptiMat T250 circuit breakers with thermomagnetic adjustable releases of the TM-M type for protection of electric motors and with electromagnetic adjustable releases of the M-M type for protection of electric motors



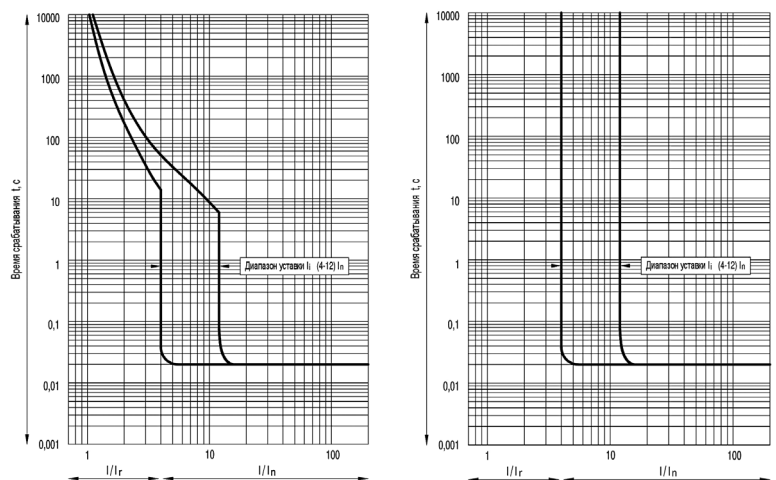
Current and time characteristics of OptiMat T400 circuit breakers with thermomagnetic adjustable releases of the TM type for protection of distribution networks and with electromagnetic adjustable releases of the M type for protection of distribution networks.



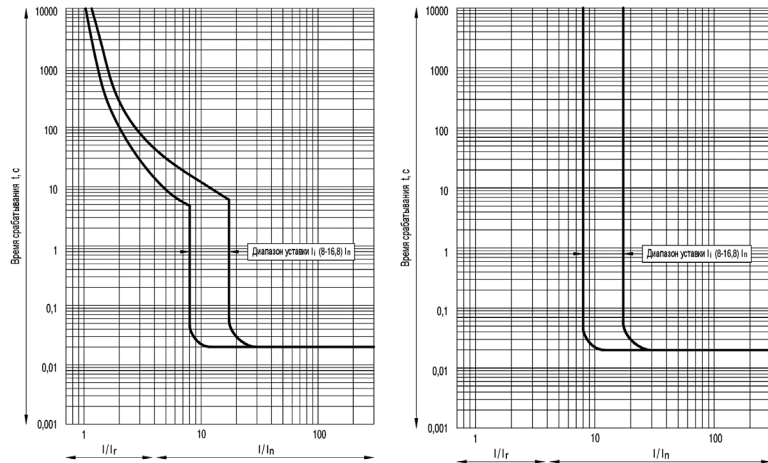
Current and time characteristics of OptiMat T400 circuit breakers with thermomagnetic adjustable releases of the TM-M type for protection of electric motors and with electromagnetic adjustable releases of the M-M type for protection of electric motors



Current and time characteristics of OptiMat T630 circuit breakers with thermomagnetic adjustable releases of the TM type for protection of distribution networks and with electromagnetic adjustable releases of the M type for protection of distribution networks

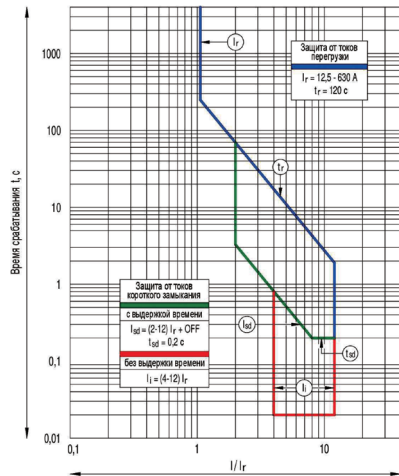


Current and time characteristics of OptiMat T630 circuit breakers with thermomagnetic adjustable releases of the TM-M type for protection of electric motors and with electromagnetic adjustable releases of the M-M type for protection of electric motors

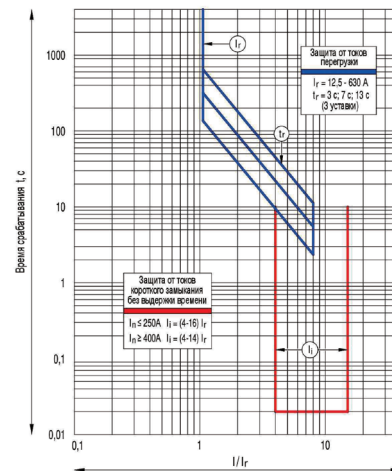


► Current and time characteristics of electronic protection releases

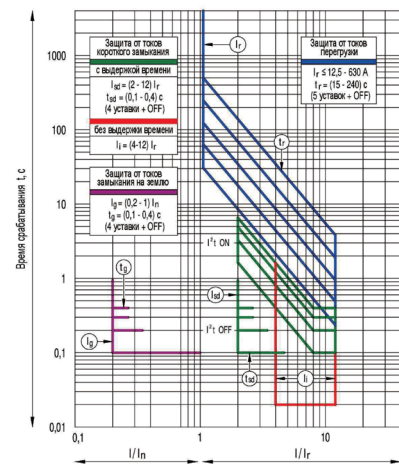
Current and time characteristics of circuit breakers with electronic releases of the ETN type for protection of distribution networks



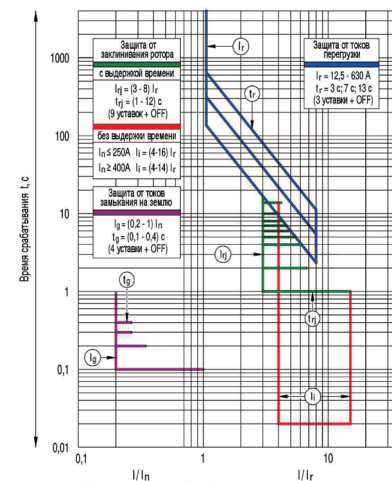
Current and time characteristics of circuit breakers with electronic releases of the ETN type for protection of electric motors



Current and time characteristics of circuit breakers with electronic releases of the ETA, ETA-COM, ETE type for protection of distribution networks

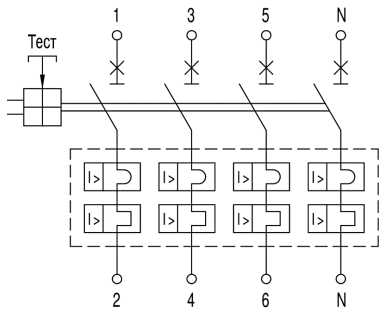


Current and time characteristics of circuit breakers with electronic releases of the ETA-M, ETA-M-COM, ETE-M type for protection of electric motors

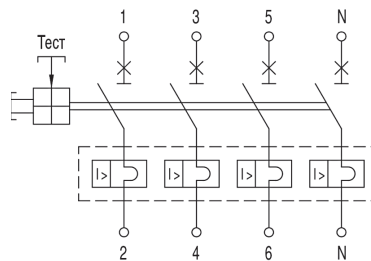


► **Electrical diagrams of OptiMat T circuit breakers and switch-disconnectors**

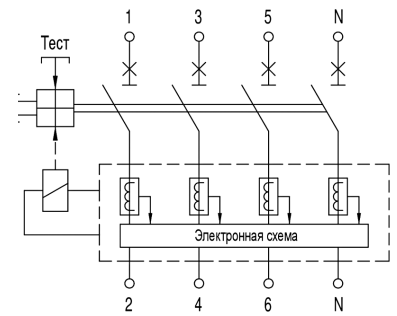
Electrical functional diagram of circuit breakers with thermomagnetic protection releases



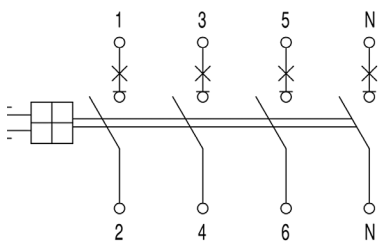
Electrical functional diagram of circuit breakers with electromagnetic protection releases



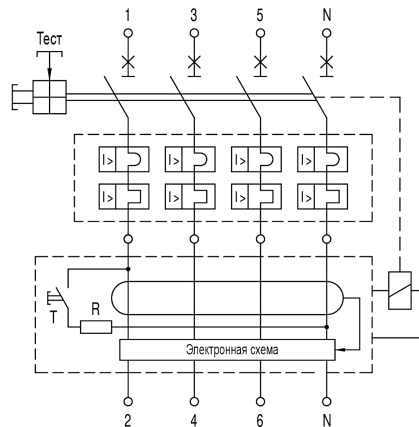
Electrical functional diagram of circuit breakers with electronic protection releases



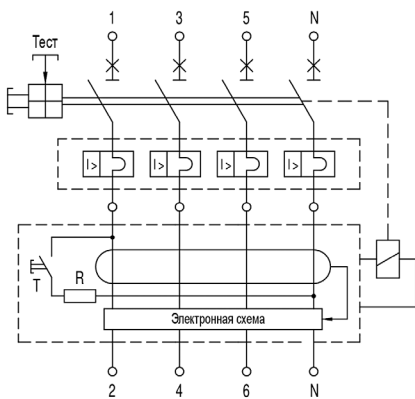
Electrical functional diagram of switch-disconnectors



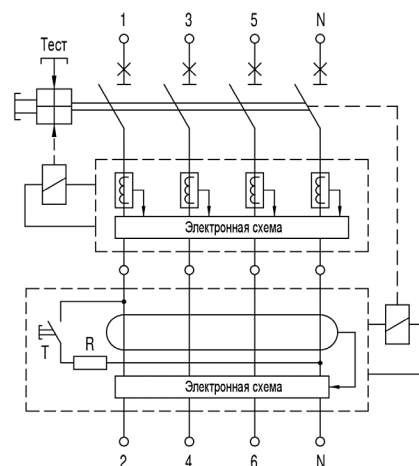
Electrical functional diagram of circuit breakers with leakage current protection unit and thermomagnetic protection releases



Electrical functional diagram of circuit breakers with leakage current protection unit and electromagnetic protection releases

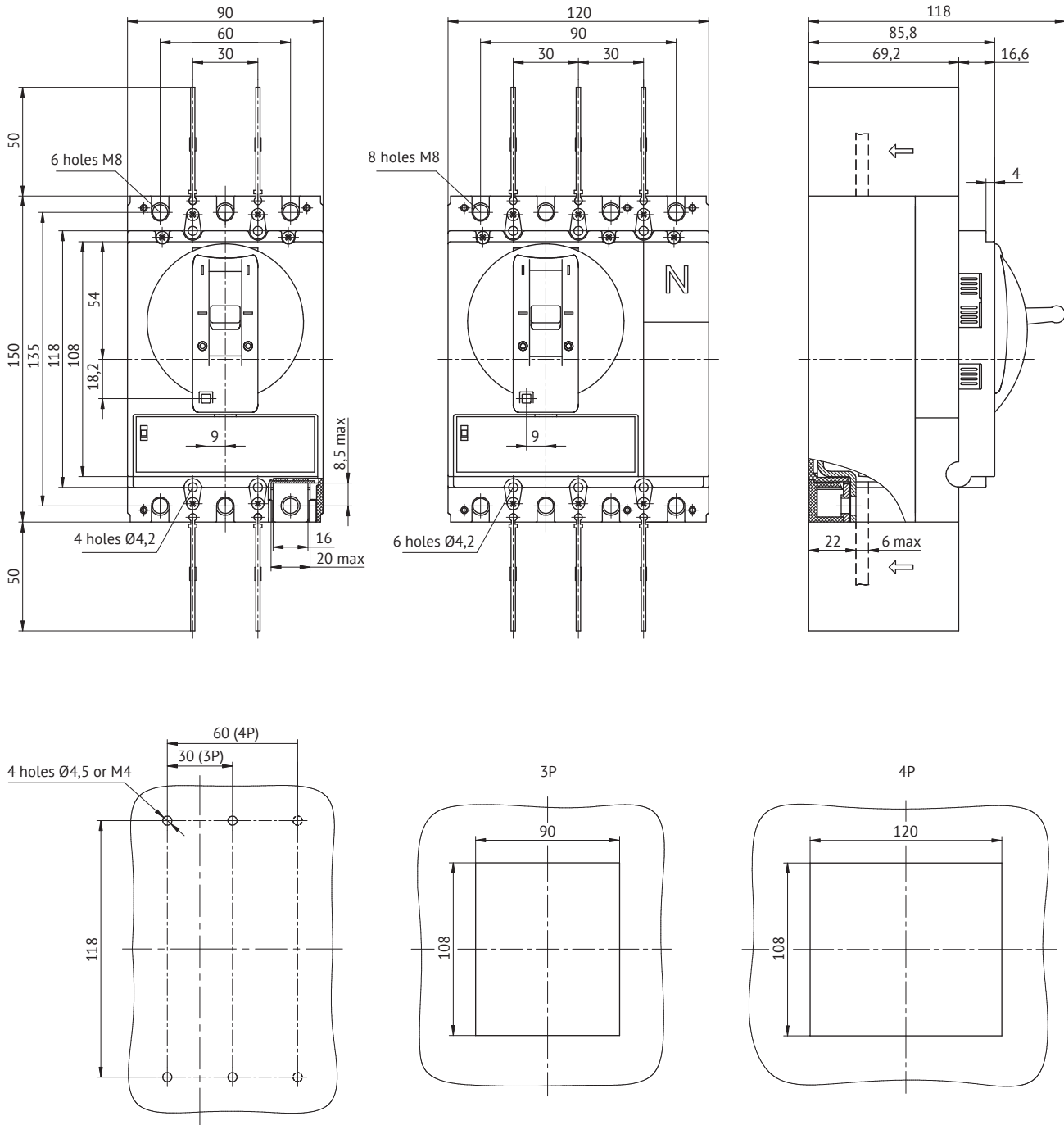


Electrical functional diagram of circuit breakers with leakage current protection unit and electronic protection releases

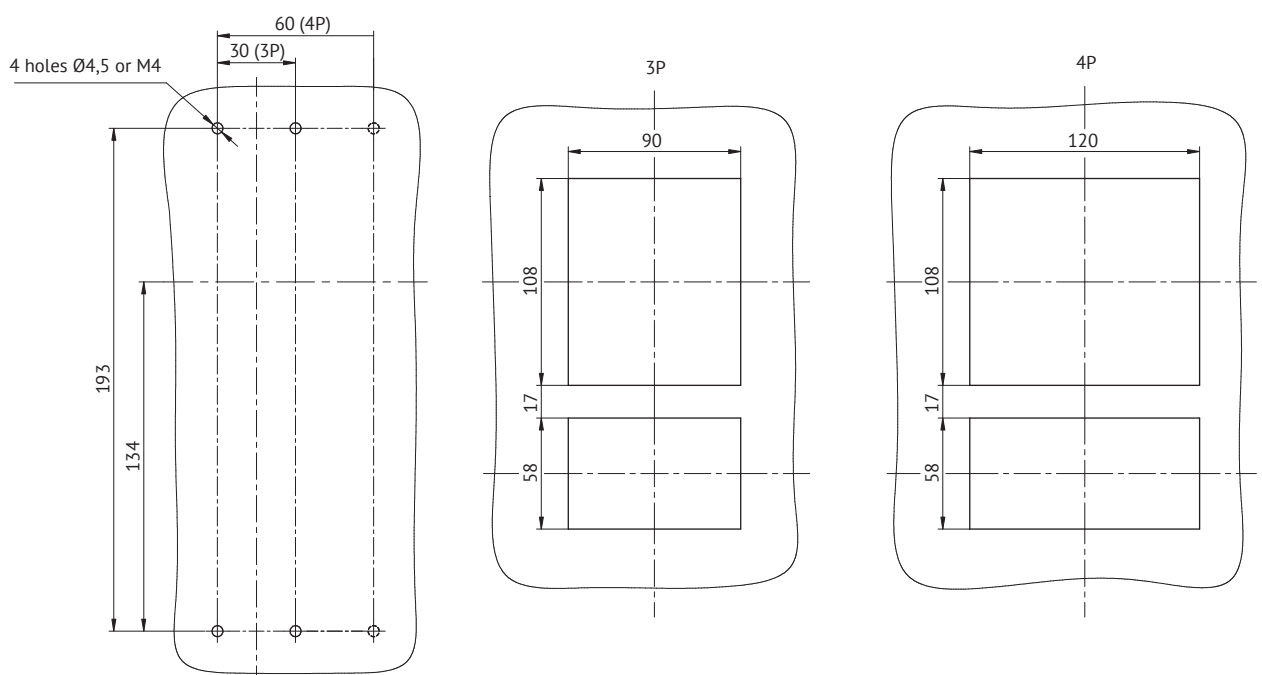
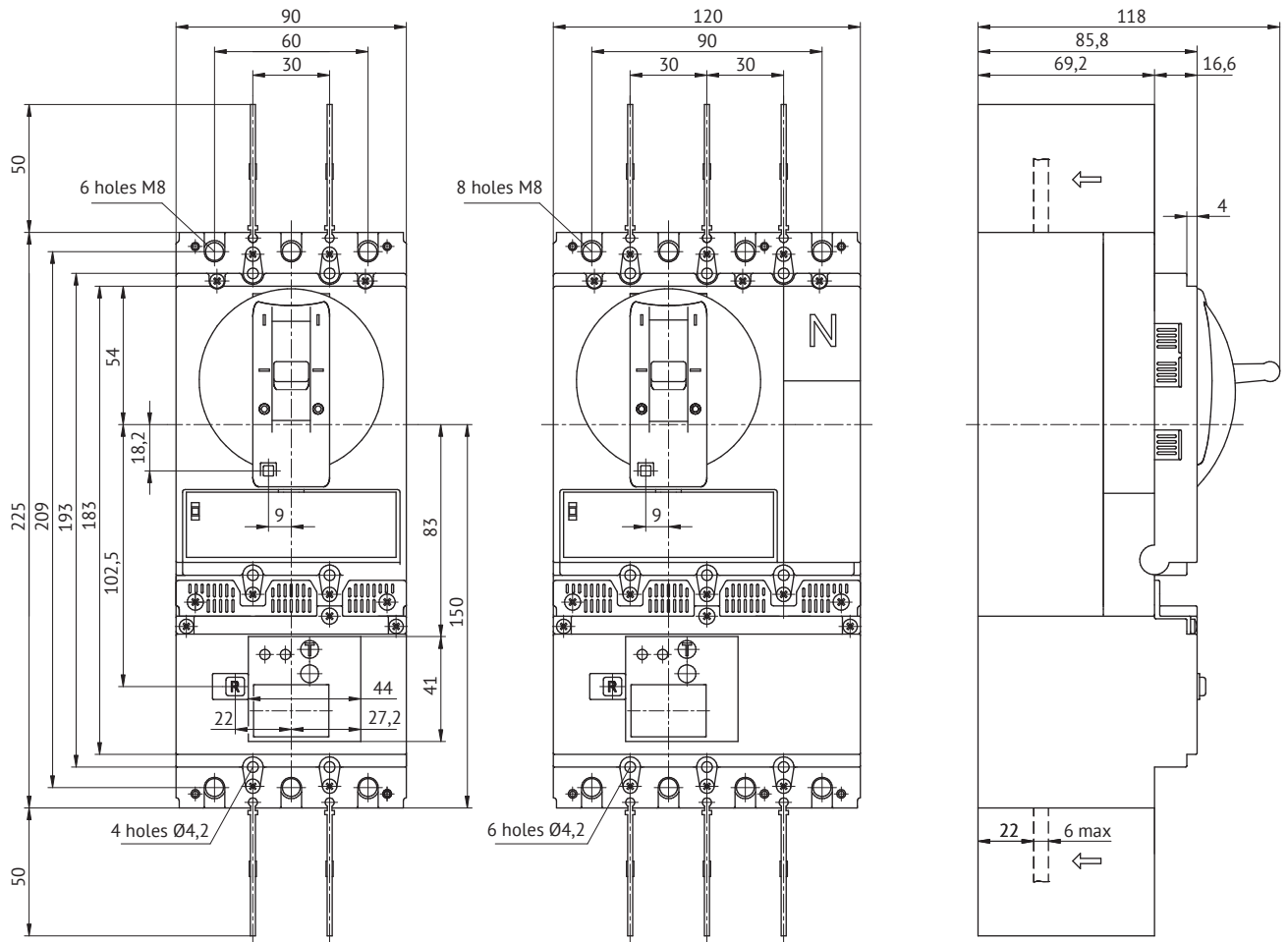


► Overall dimensions of OptiMat T (mm)

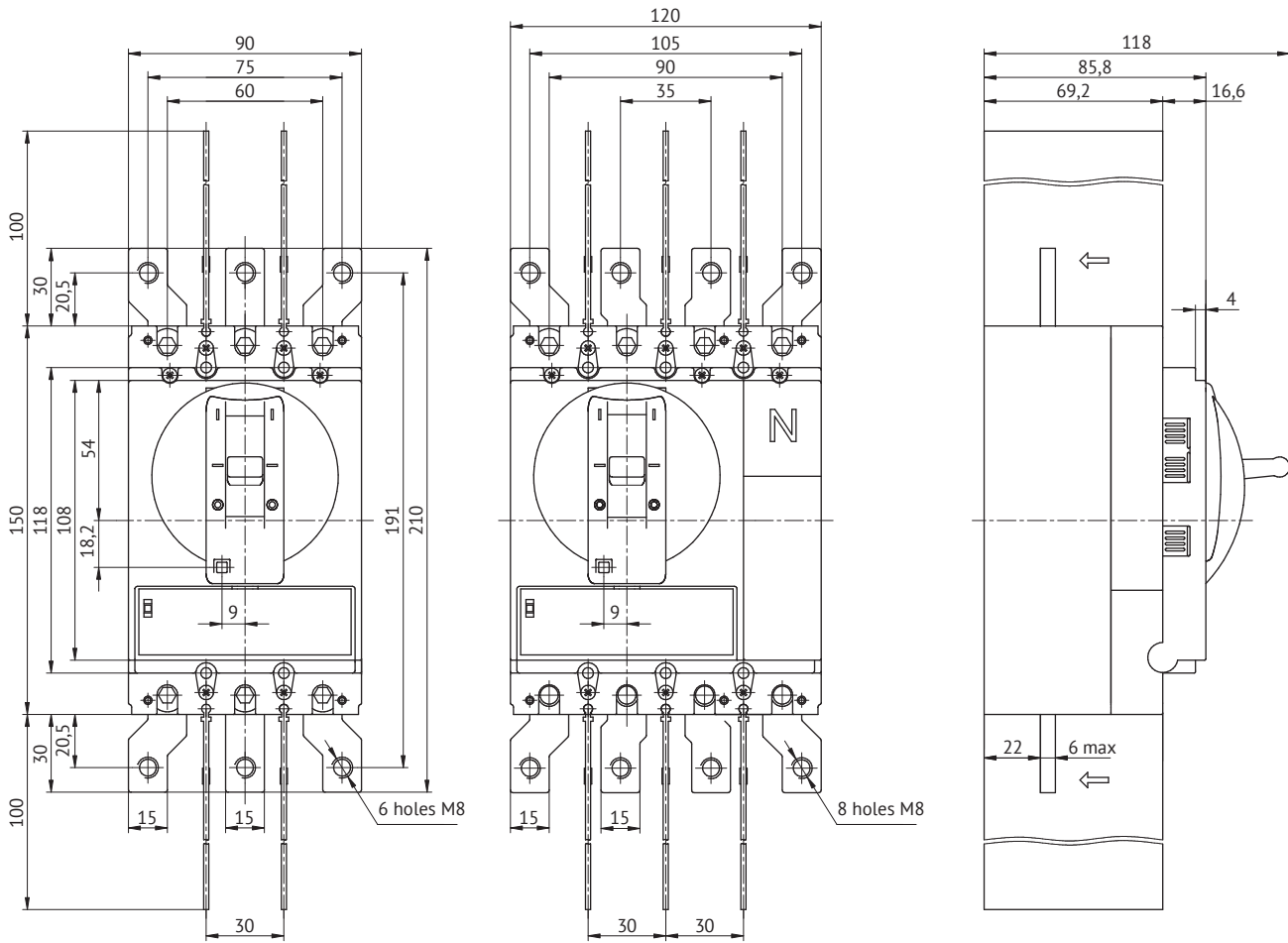
Stationary OptiMat T125-T160



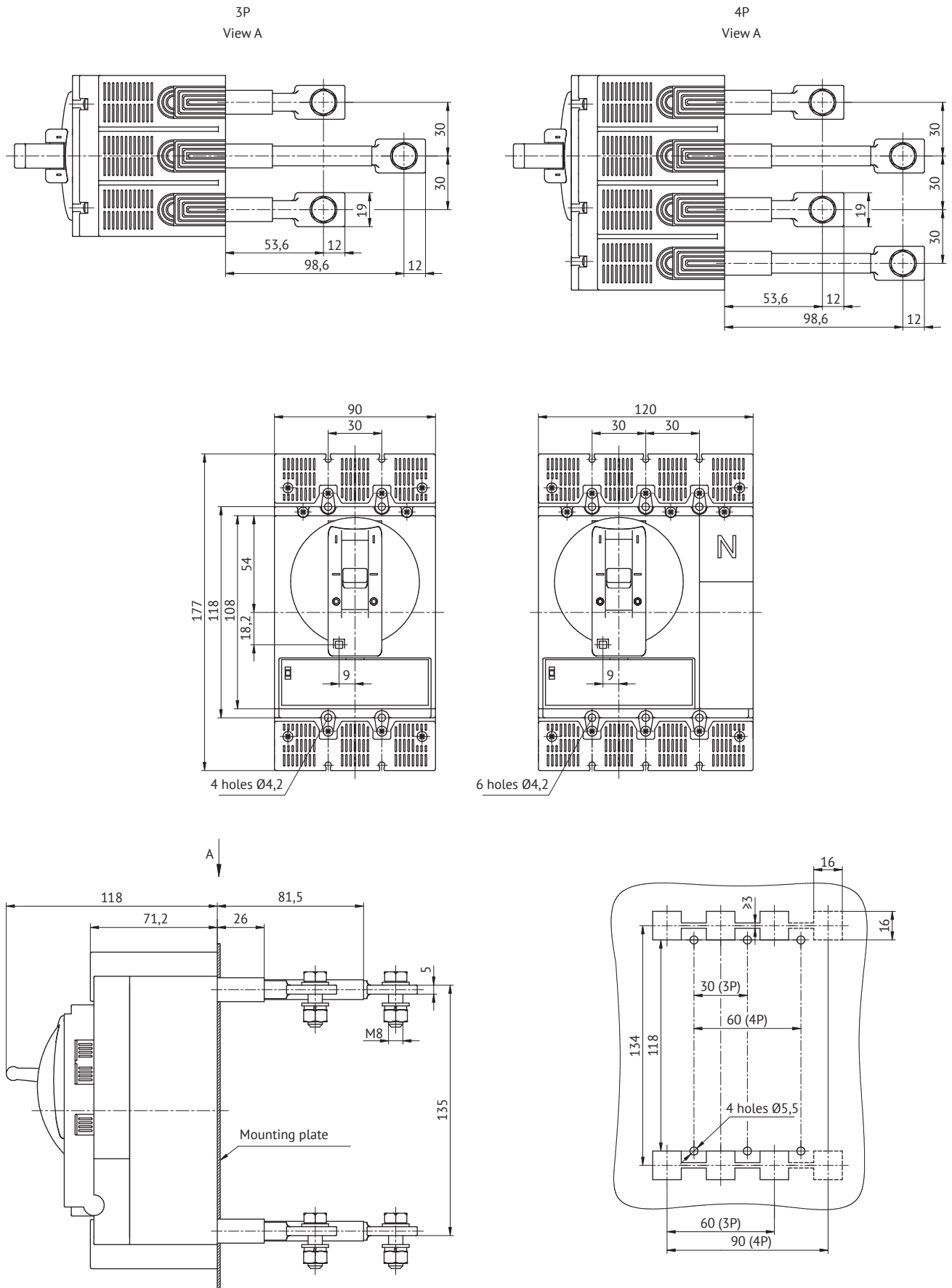
OptiMat T125-T160-RC



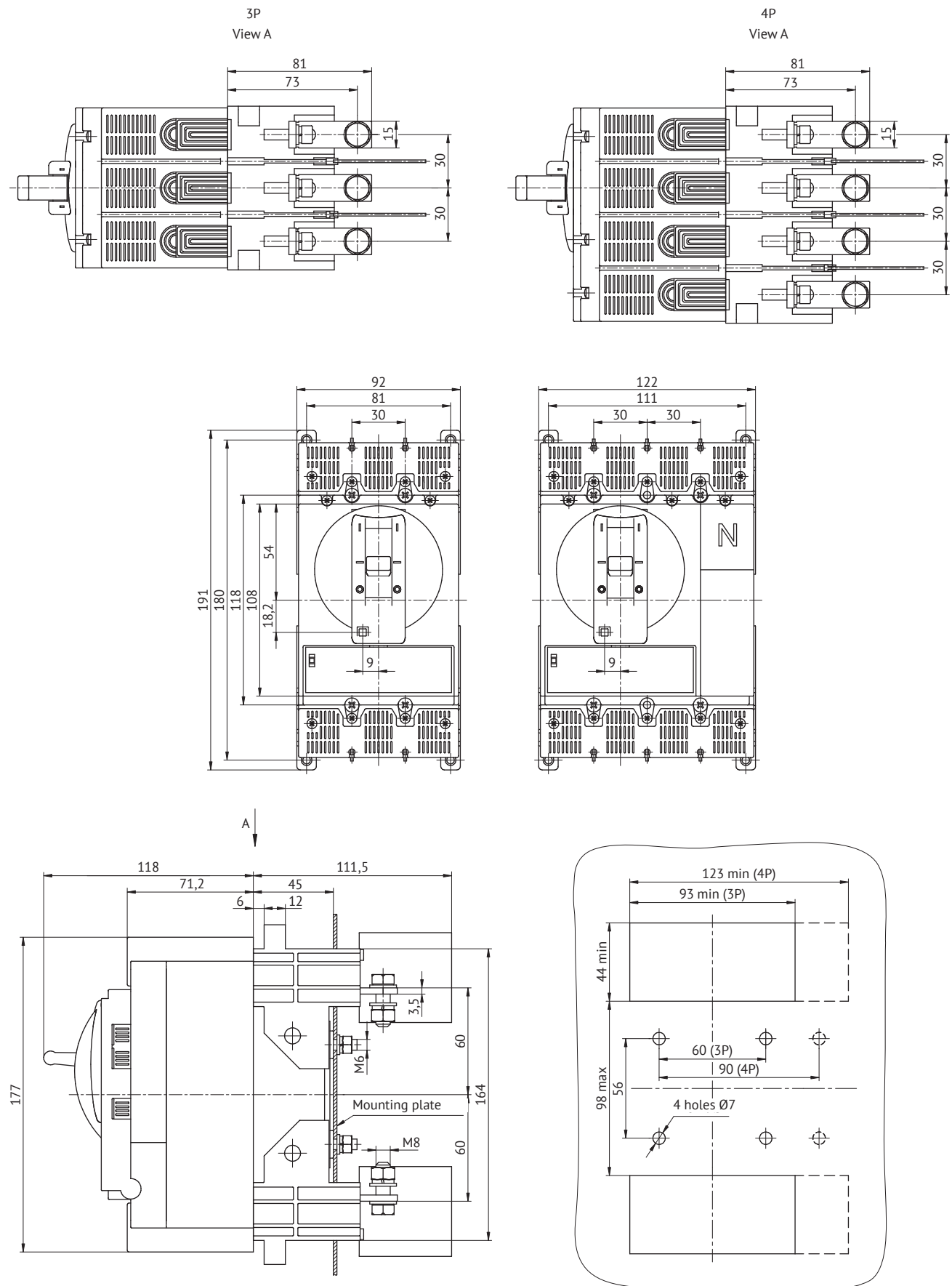
OptiMat T125-T160 with EST expanded terminals



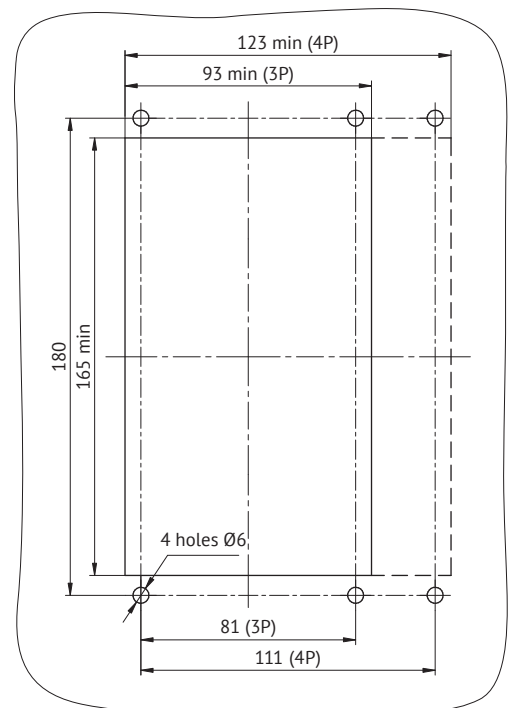
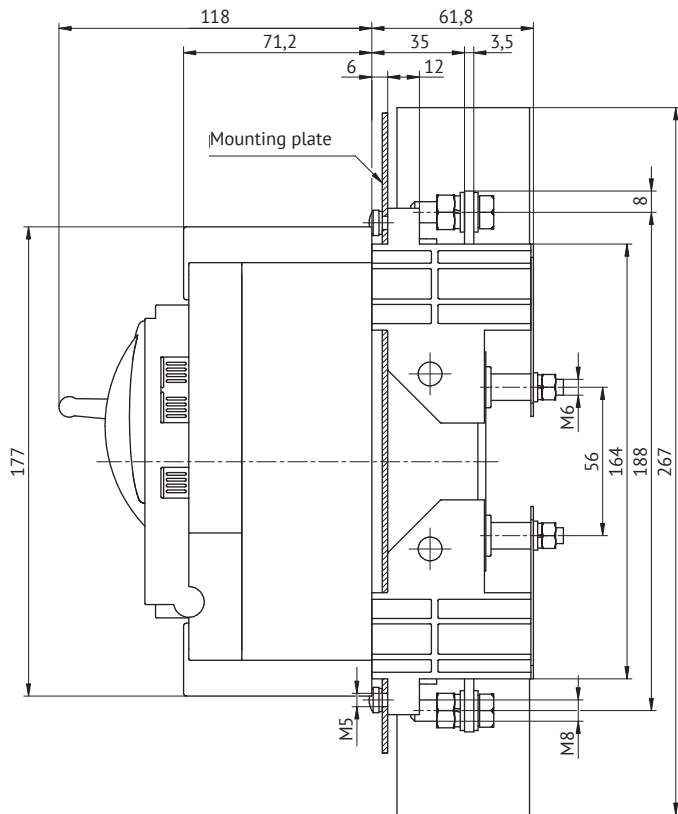
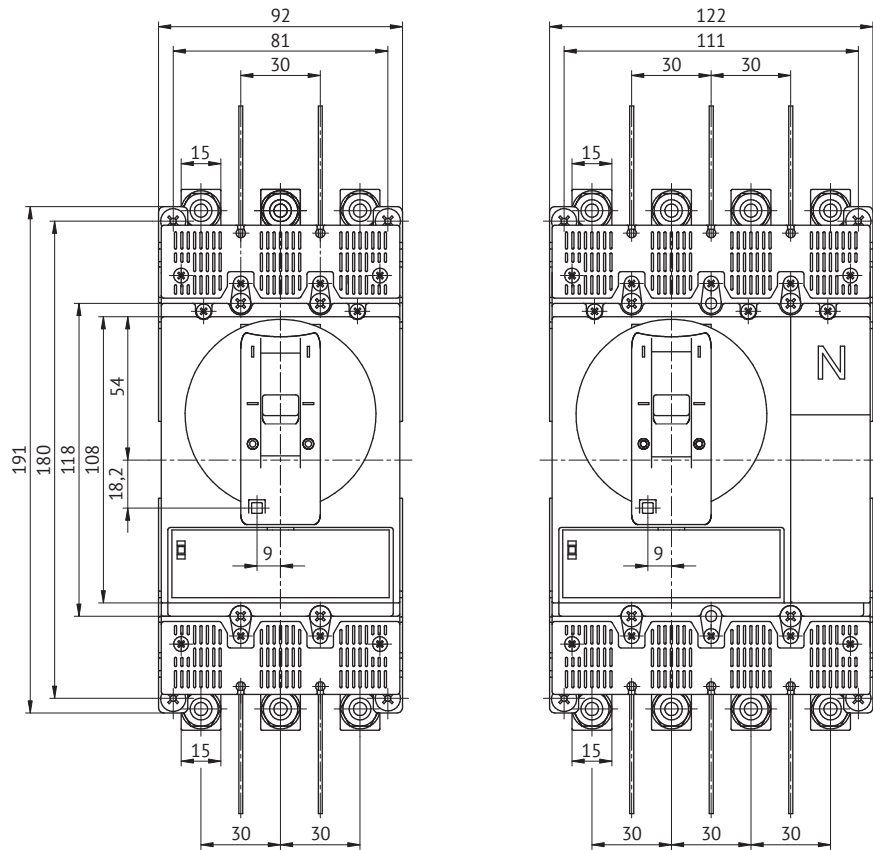
OptiMat T125-T160 with ERT rear terminals



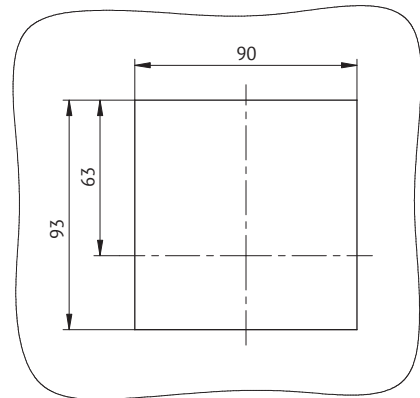
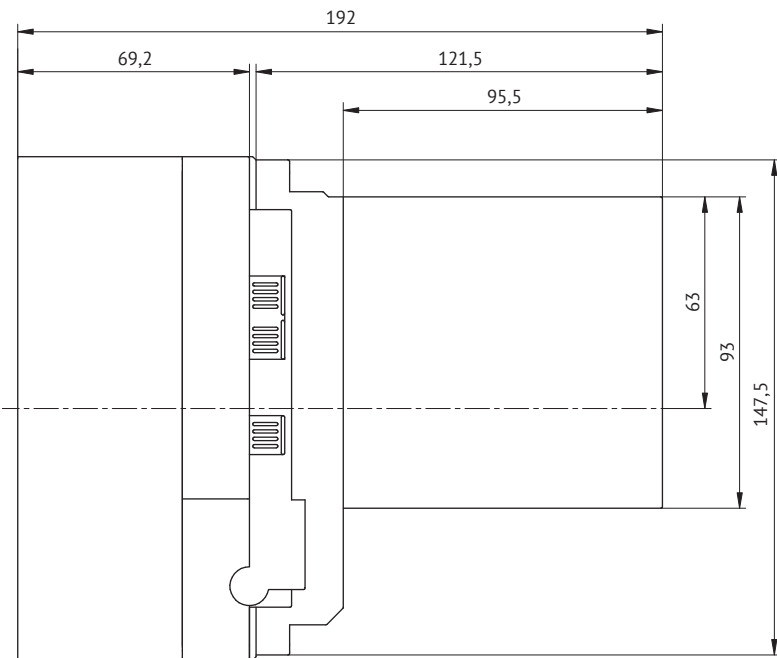
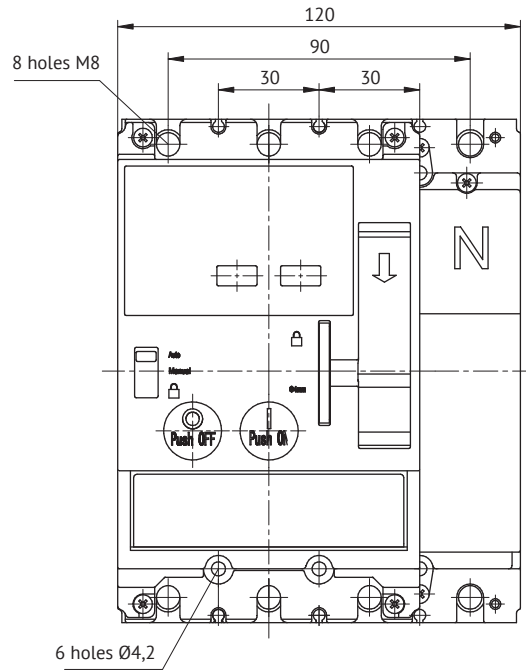
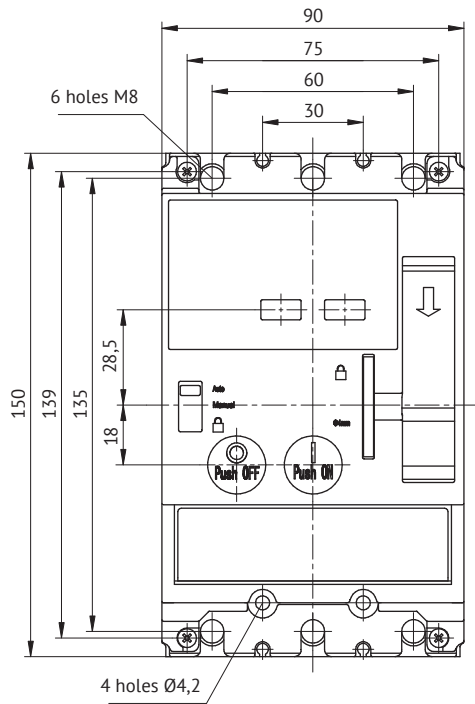
OptiMat T125-T160 plug-in rear connection



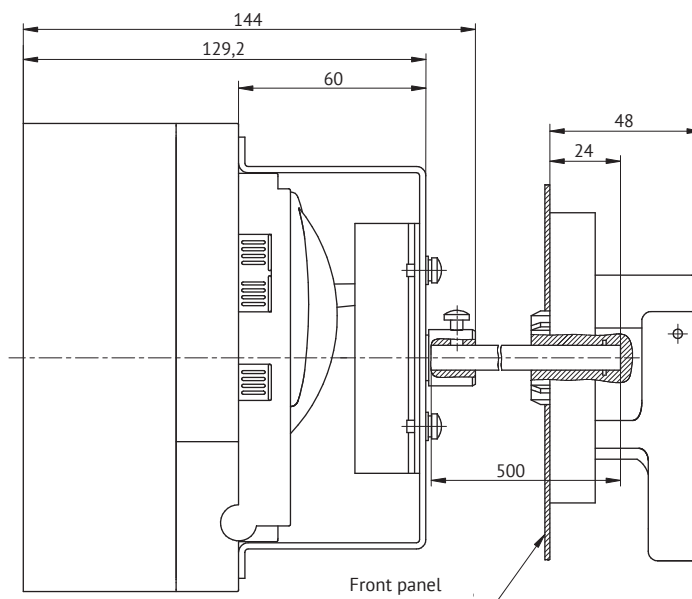
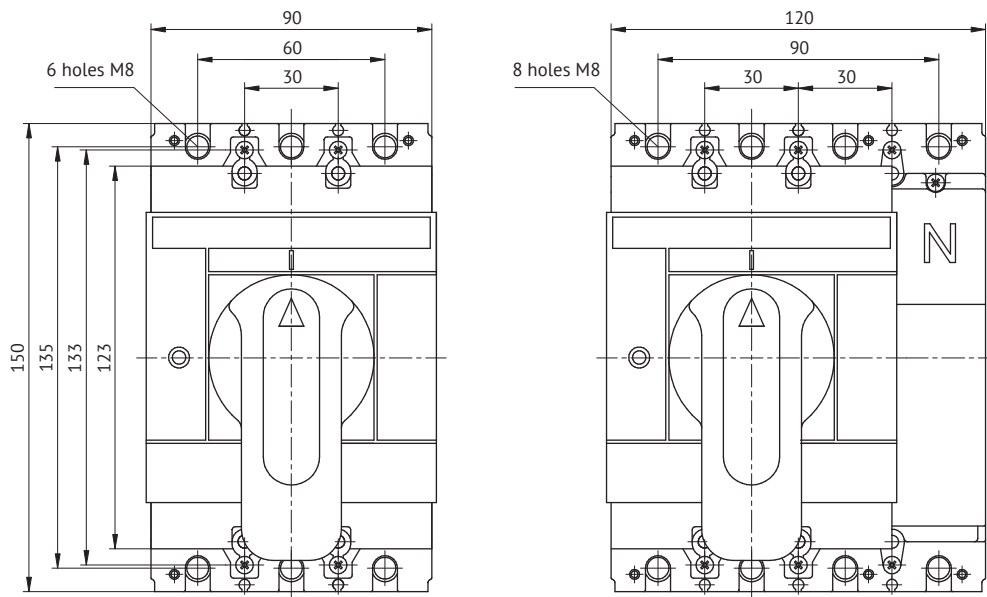
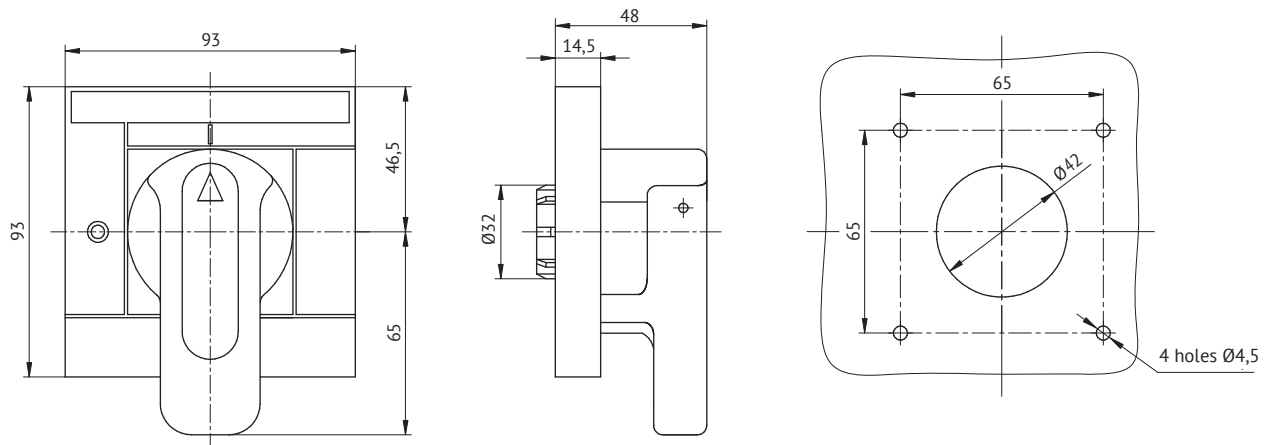
OptiMat T125-T160 plug-in front connection



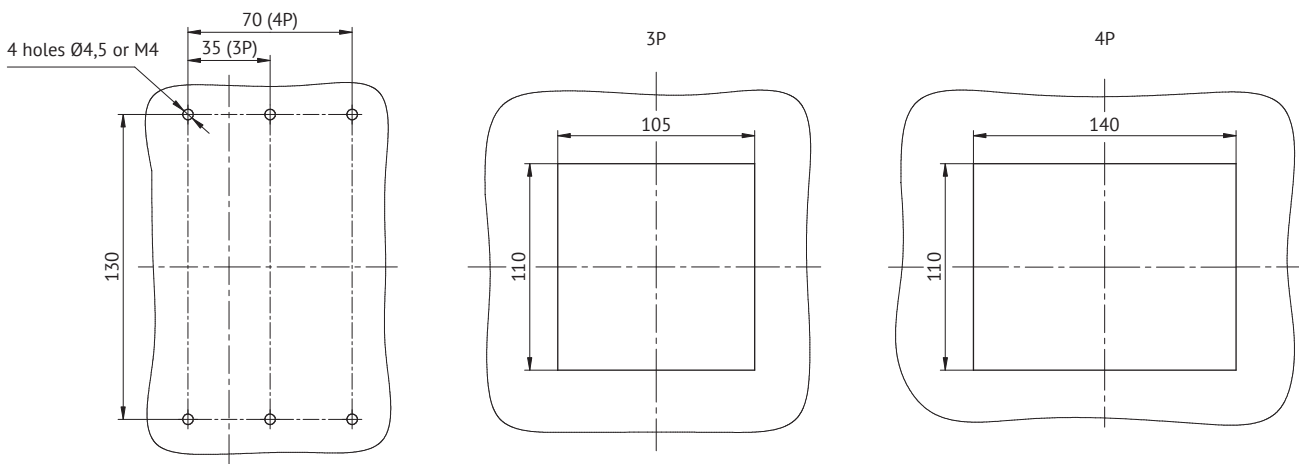
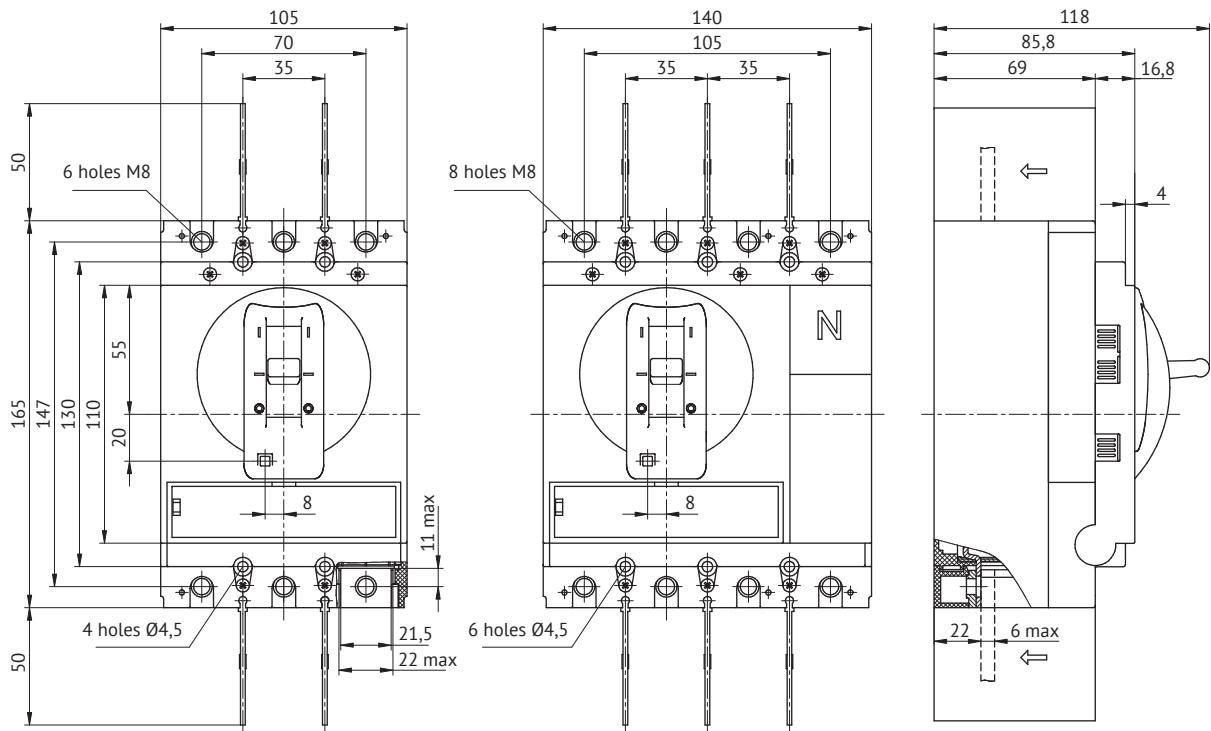
OptiMat T125-T160 with ESMO motor drive



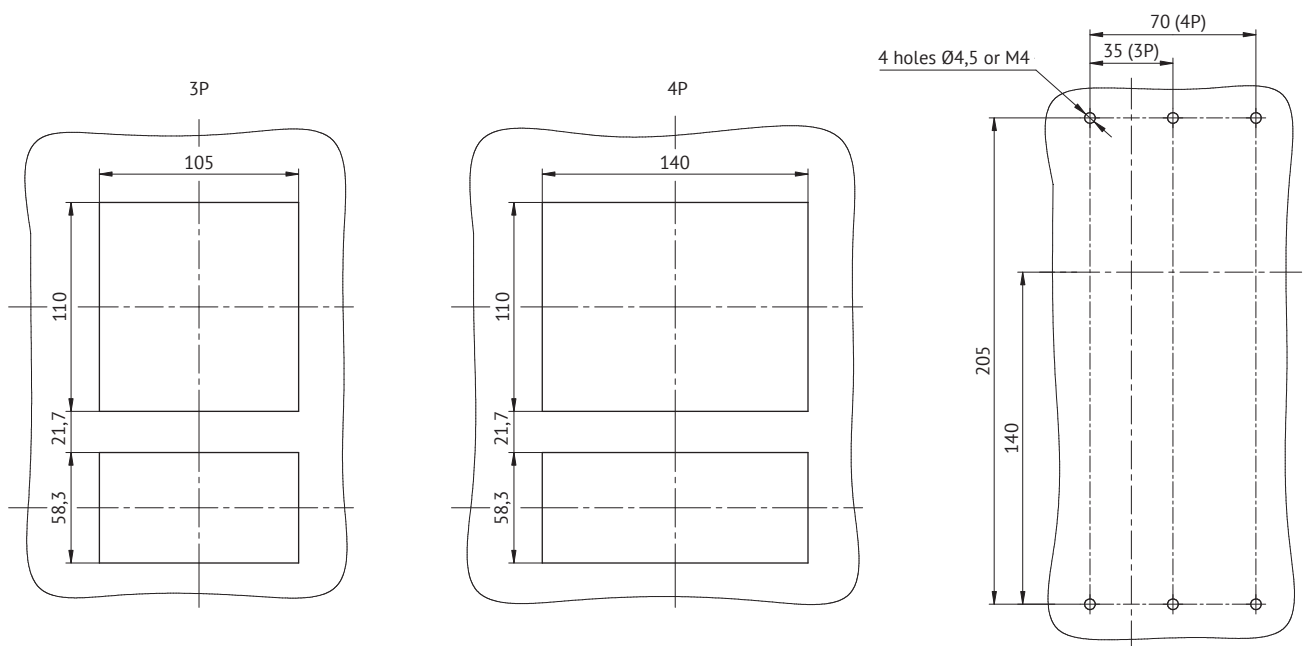
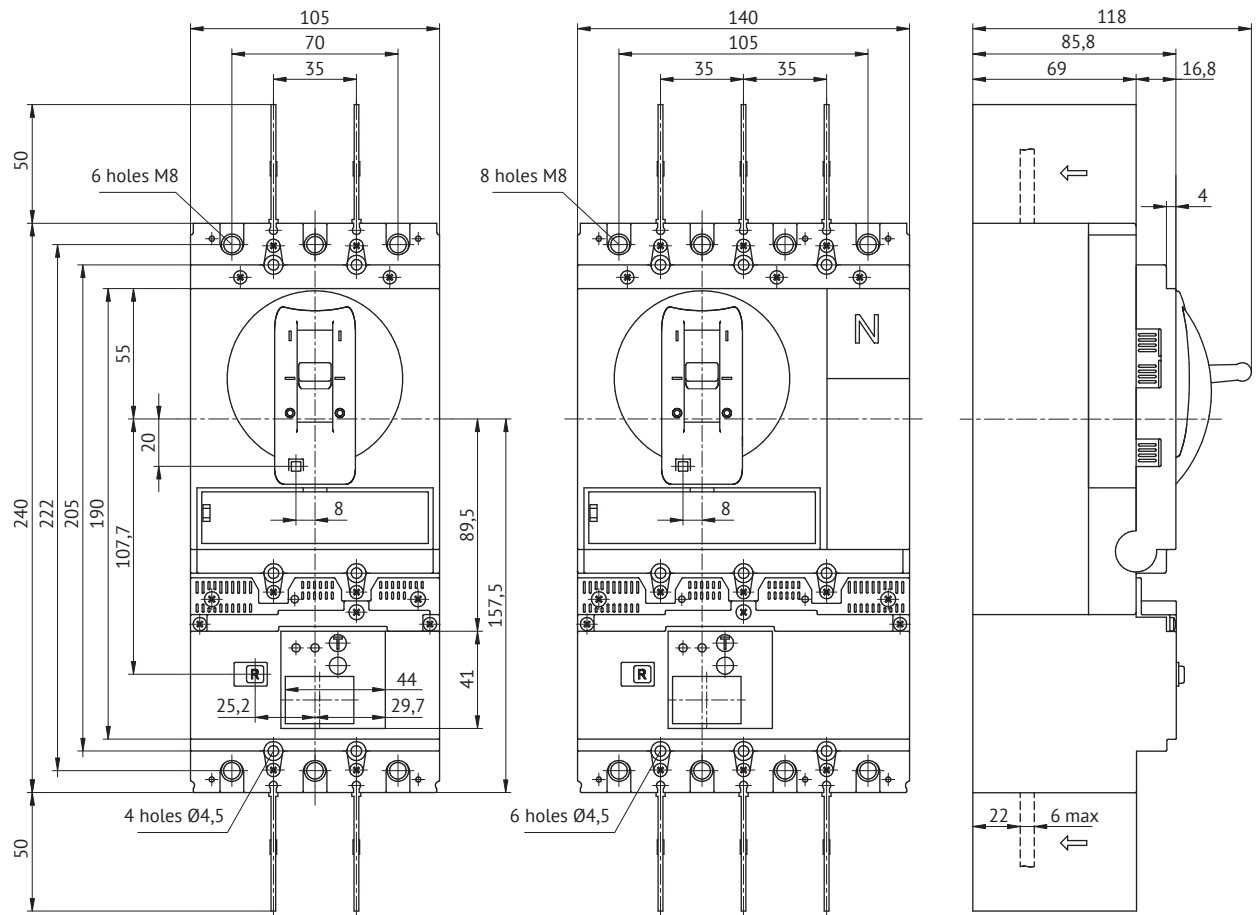
OptiMat T125-T160 with RH-E external rotary handle



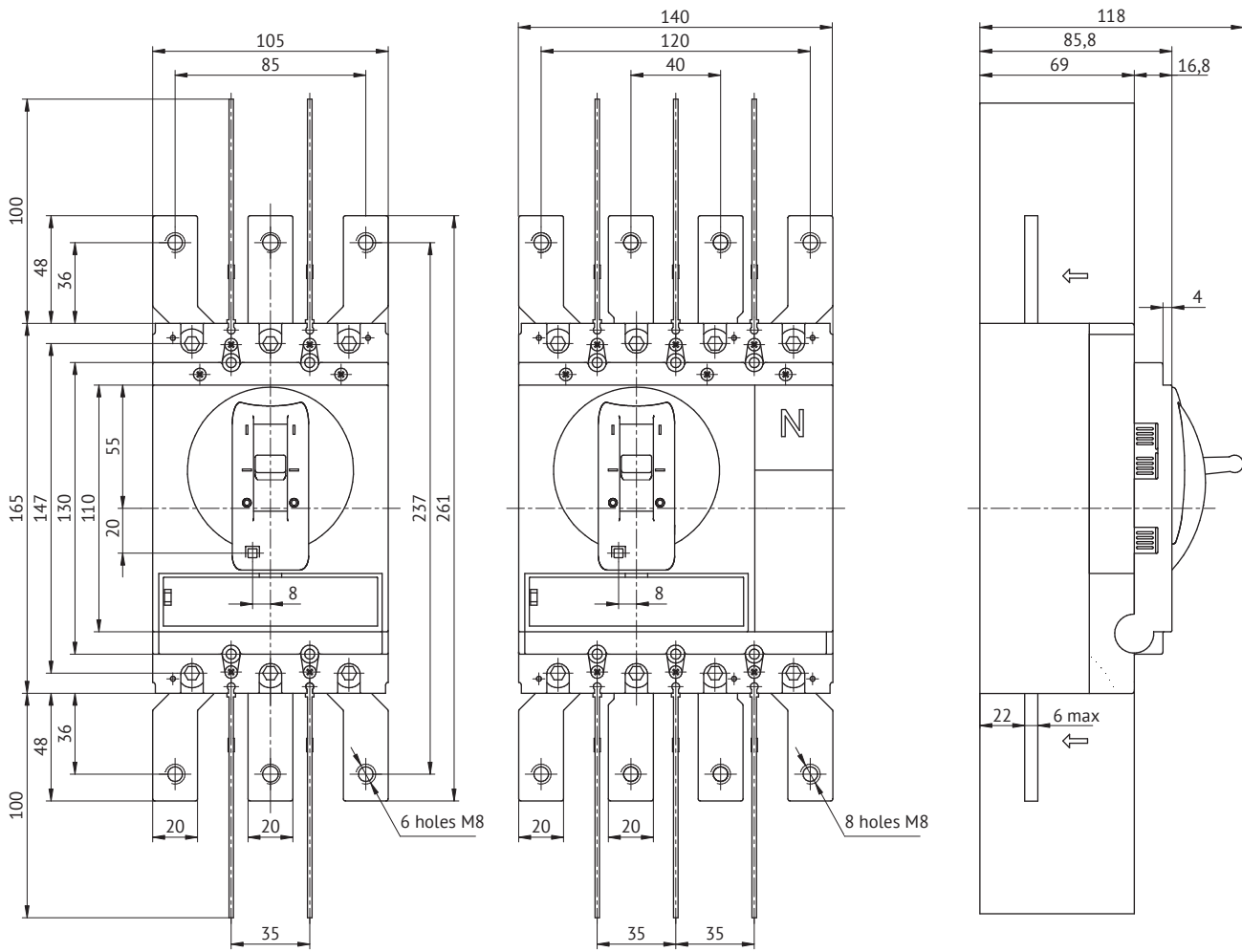
Stationary OptiMat T250



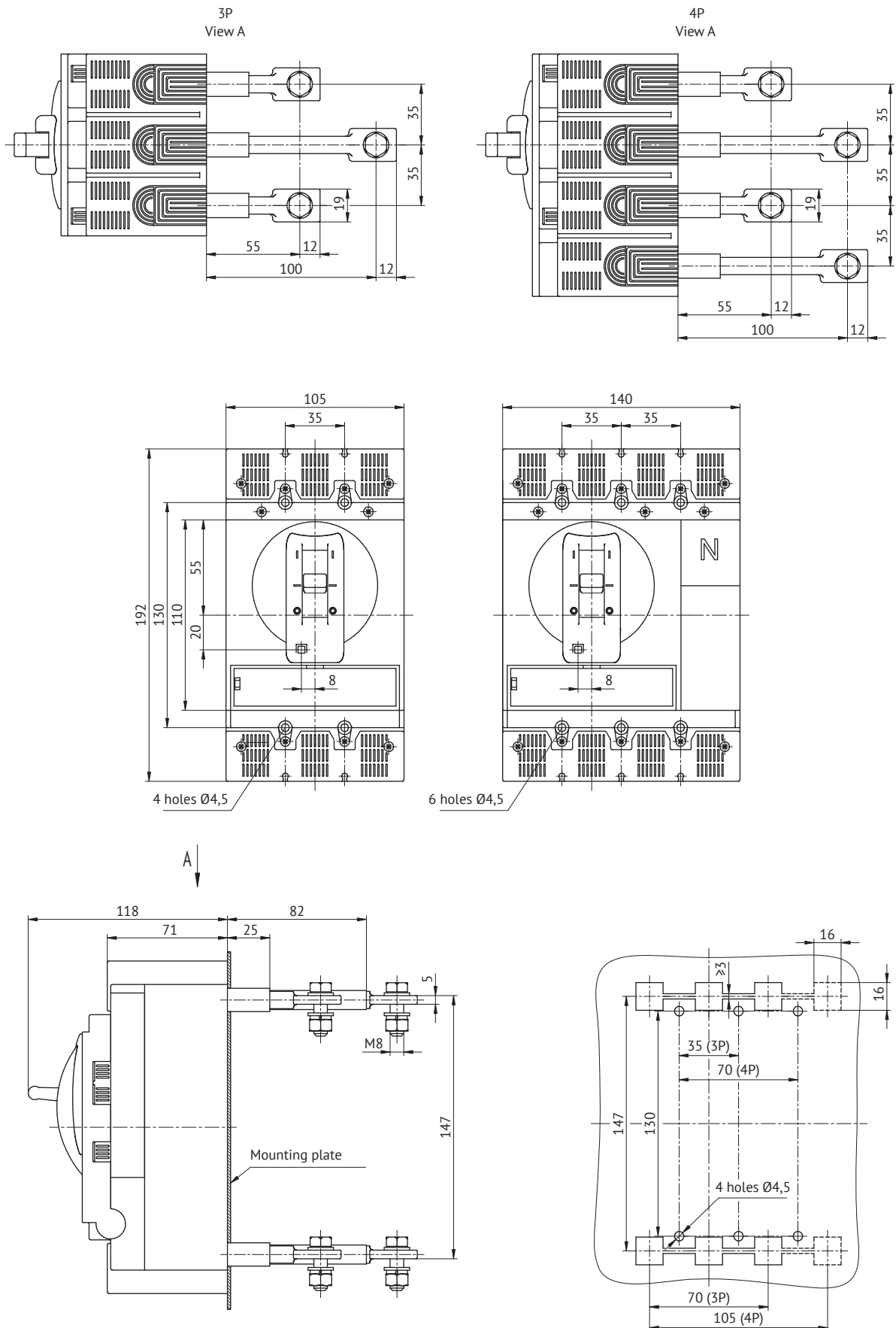
OptiMat T250-RC



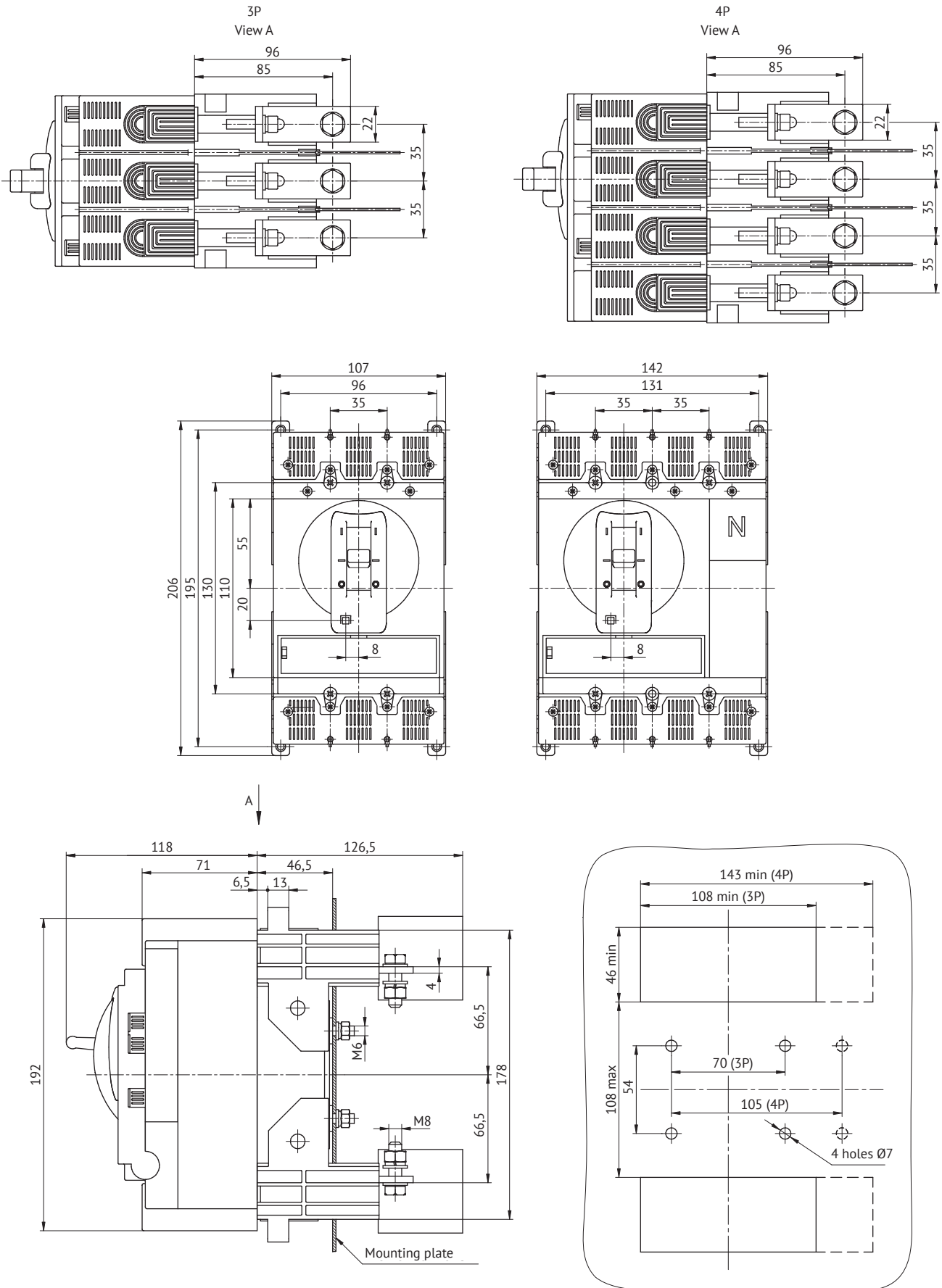
OptiMat T250 with EST expanded terminals



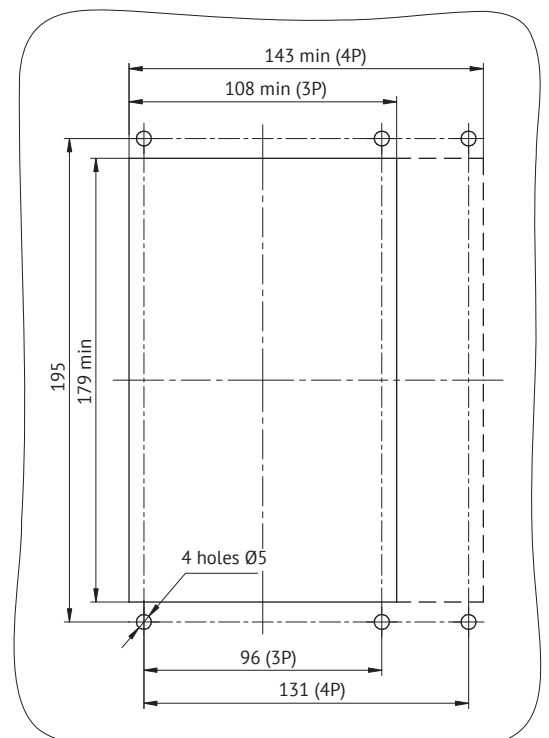
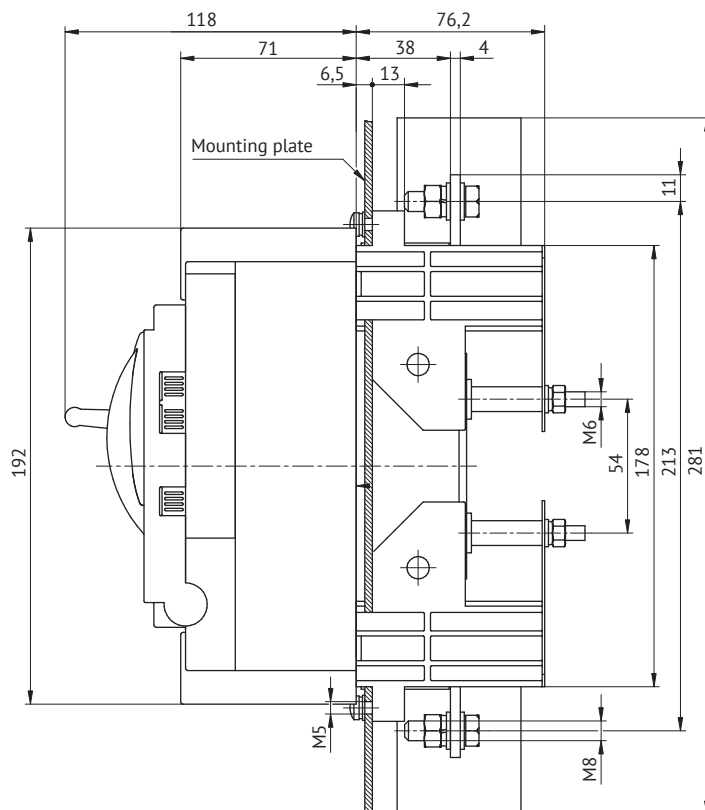
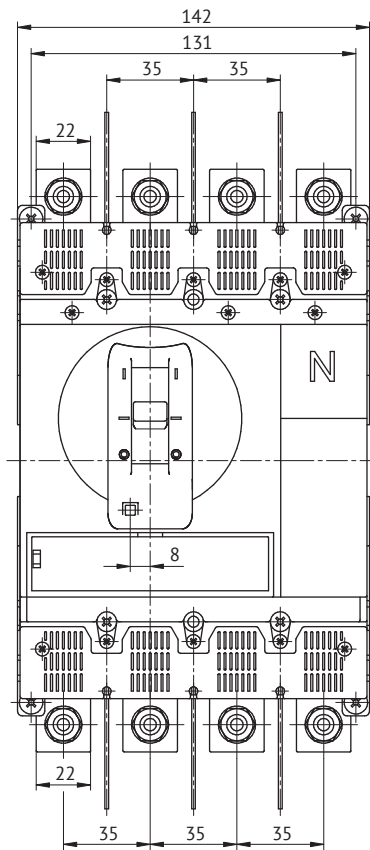
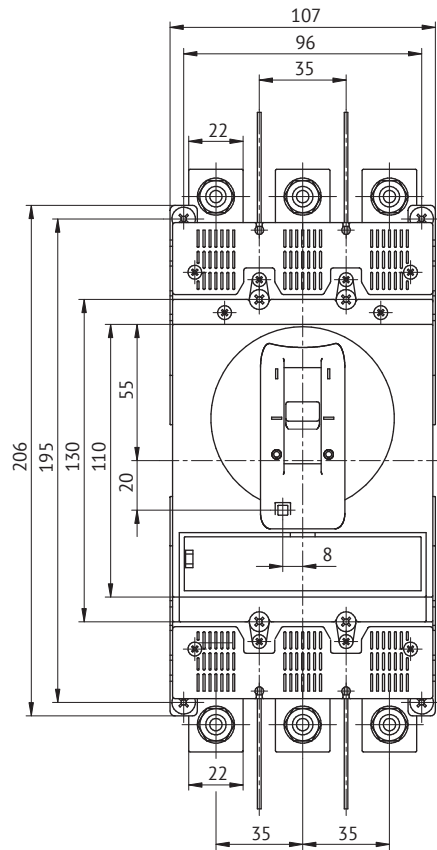
OptiMat T250 with ERT rear terminals



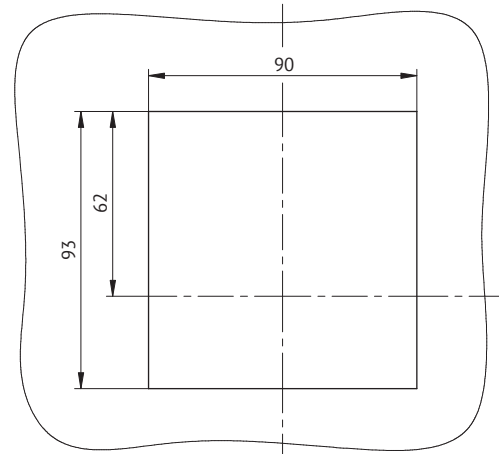
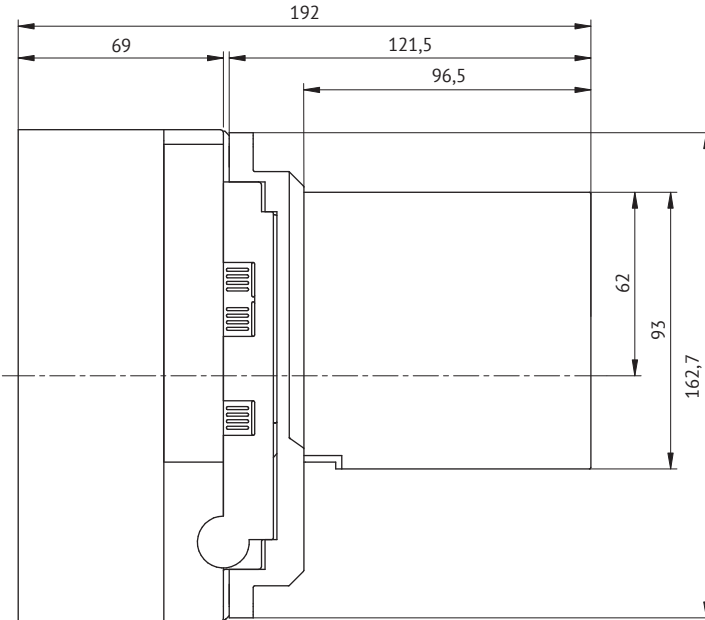
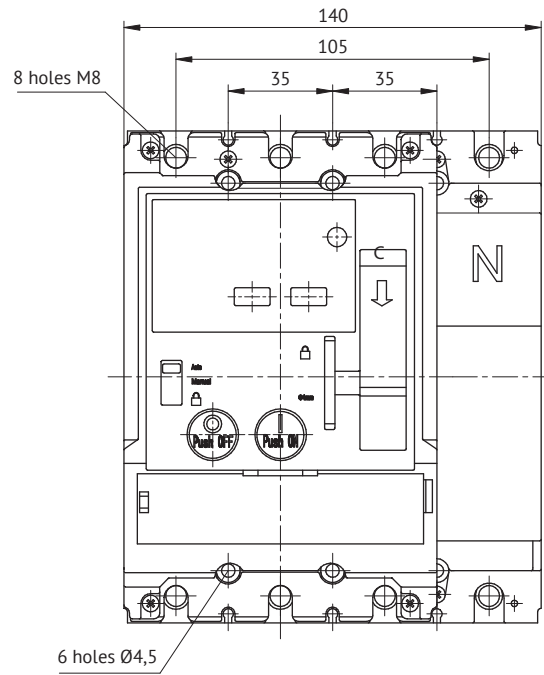
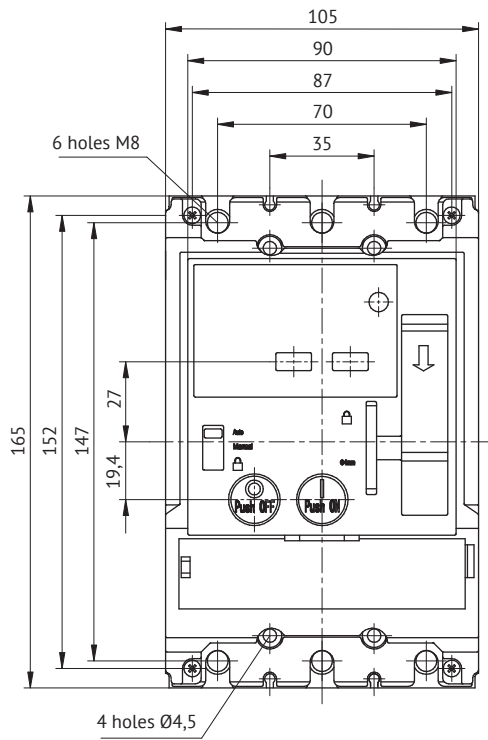
OptiMat T250 plug-in rear connection



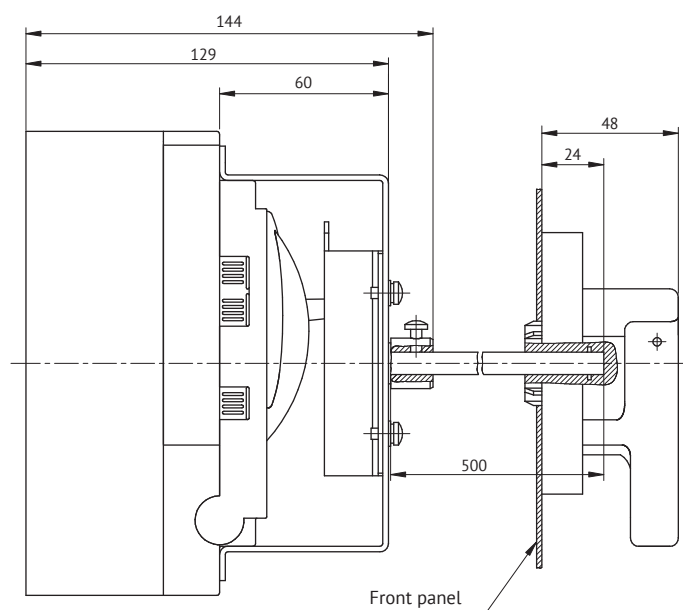
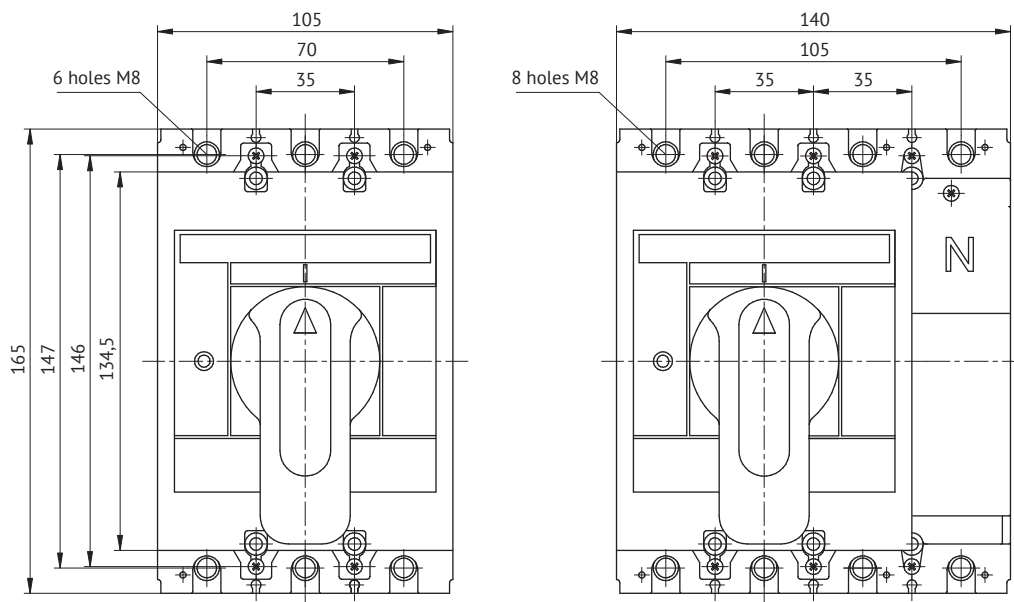
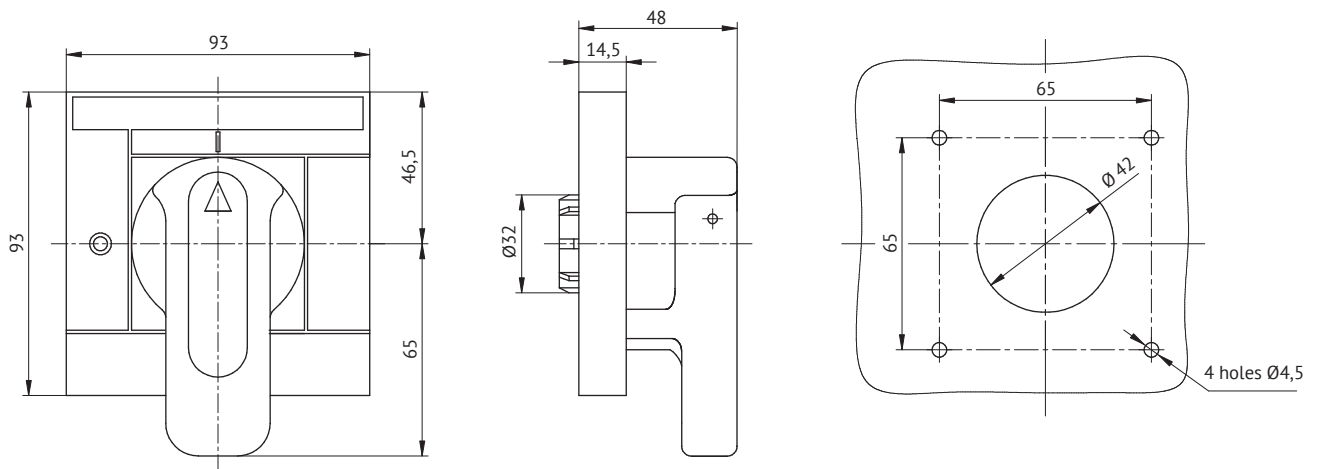
OptiMat T250 plug-in front connection



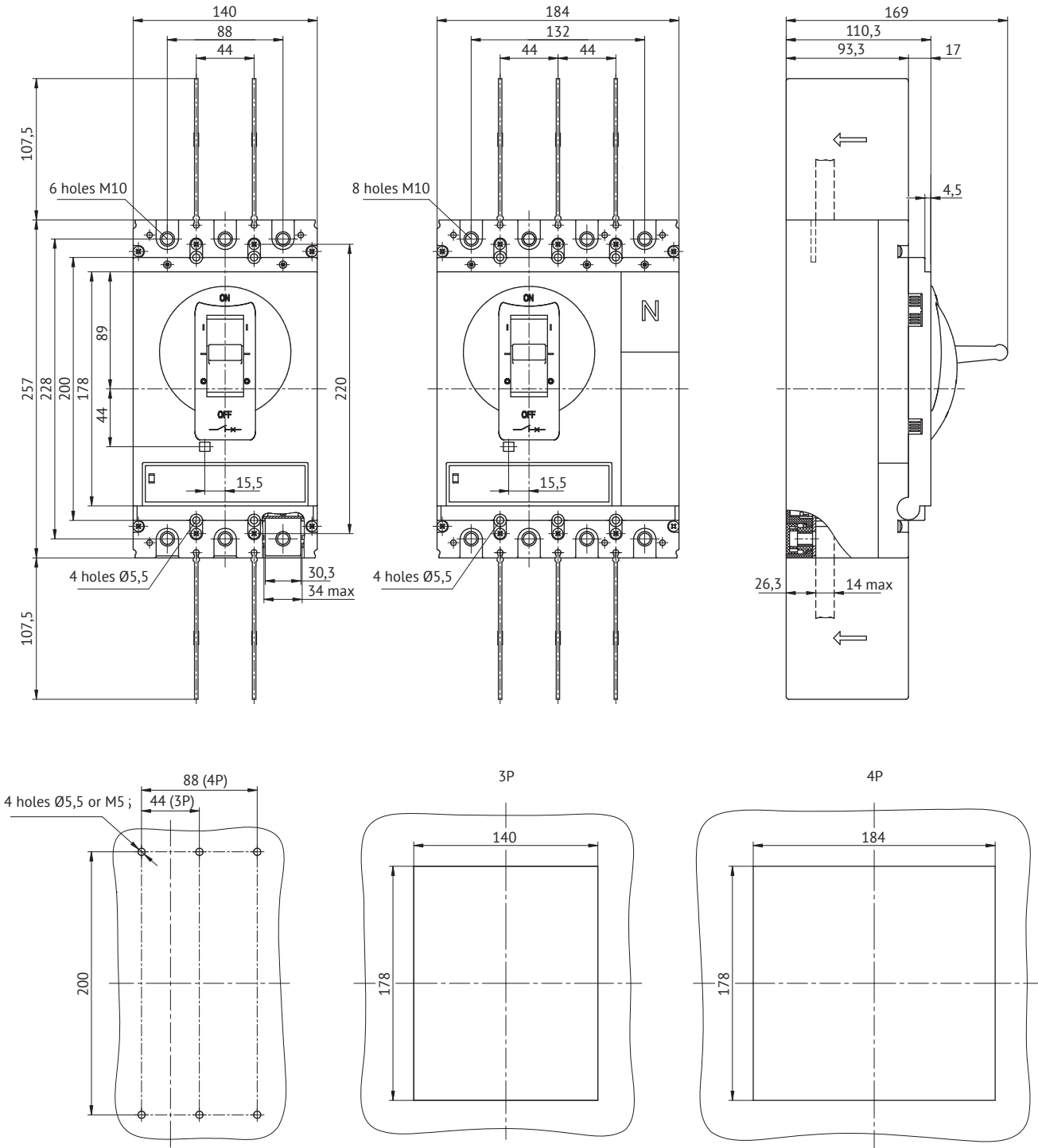
OptiMat T250 with ESMO motor drive



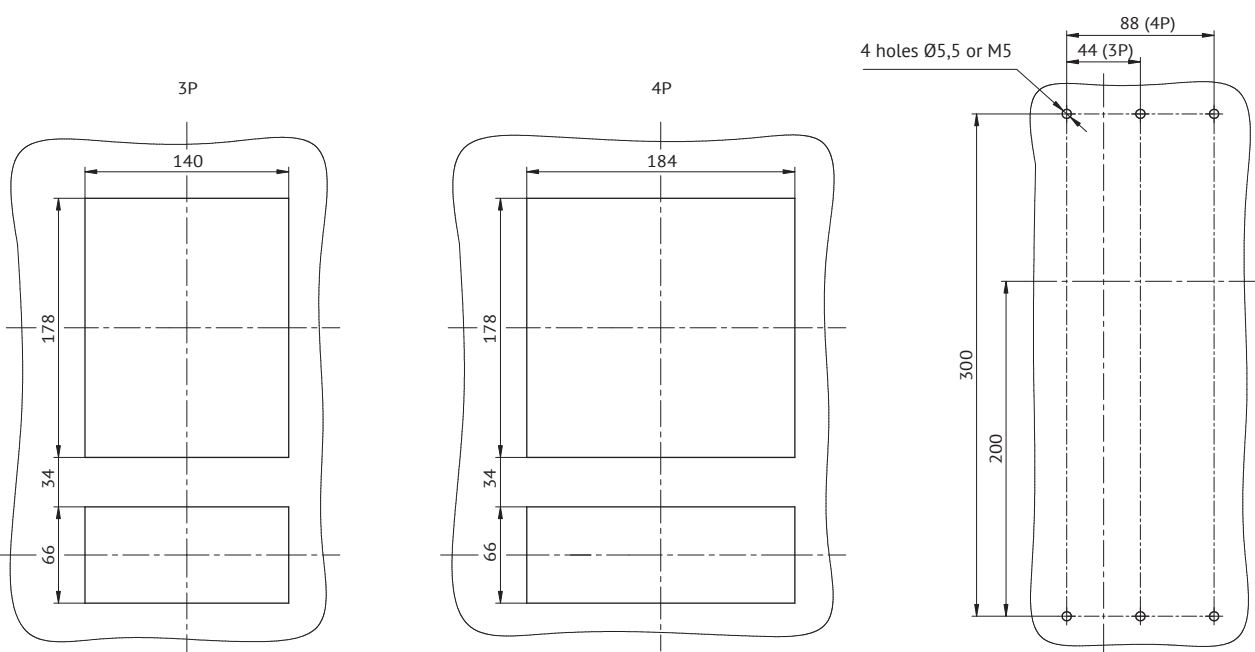
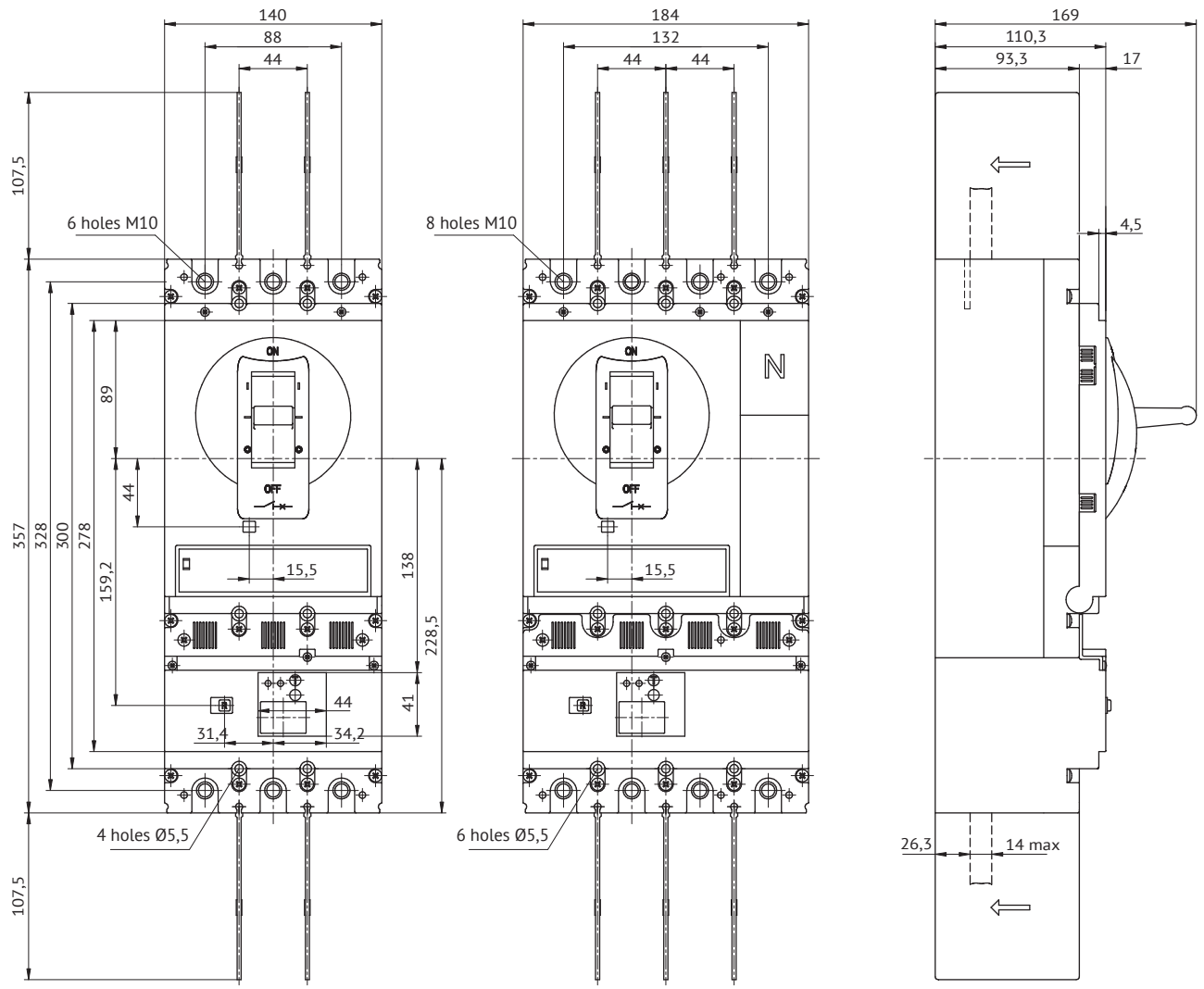
OptiMat T125-T160 with RH-E external rotary handle



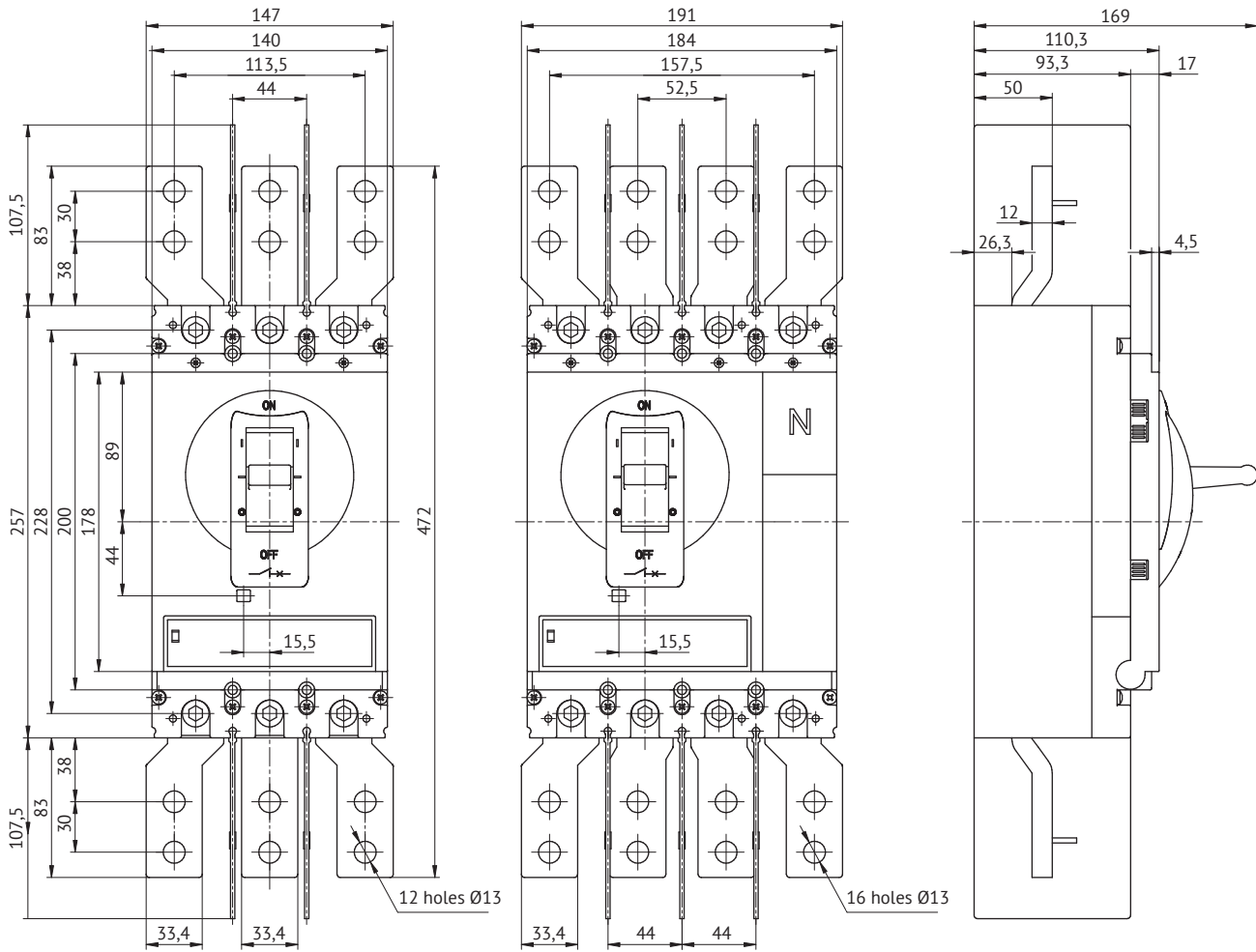
Stationary OptiMat T400-T630



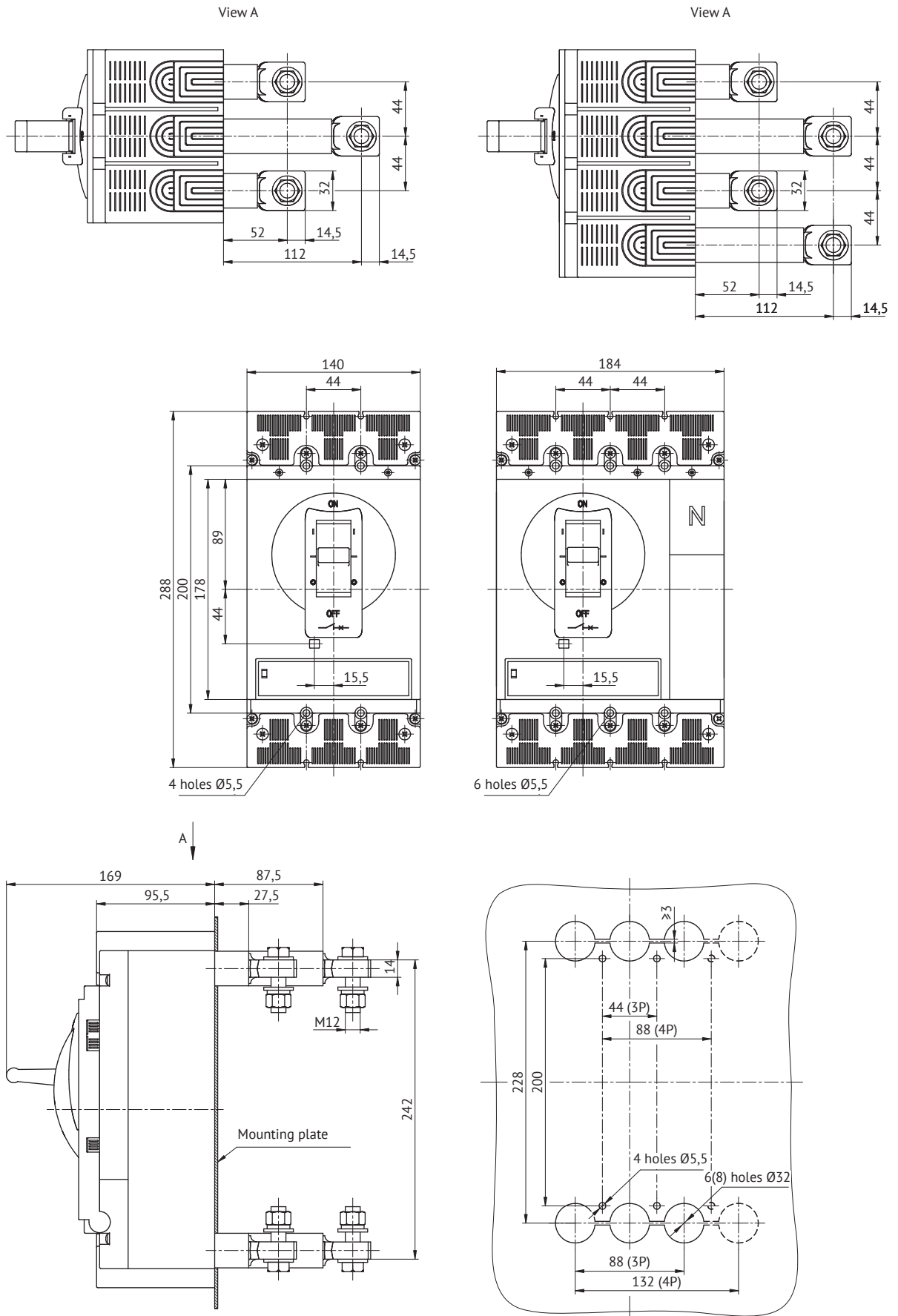
OptiMat T400-T630-RC



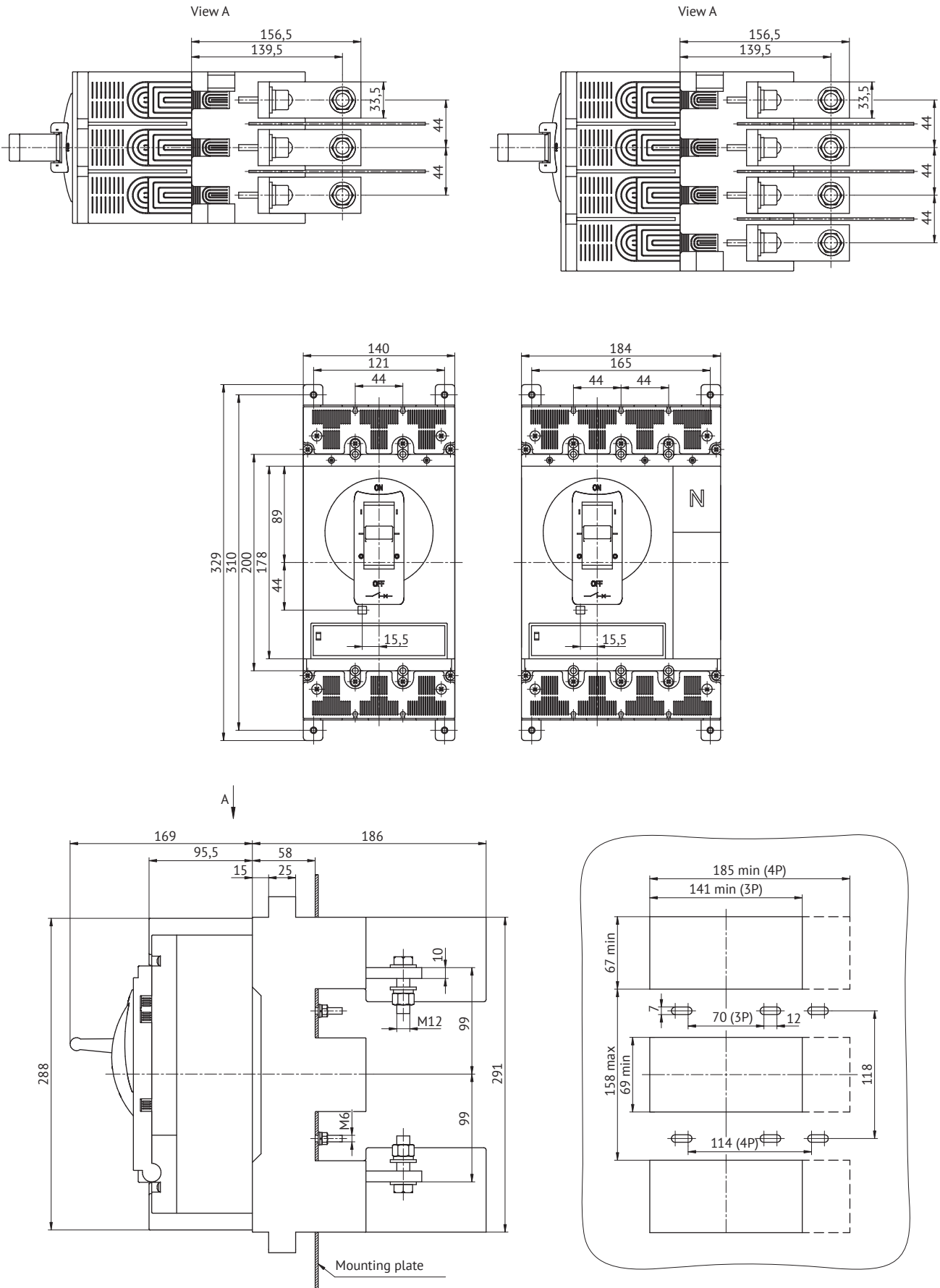
OptiMat T400-T630 with EST expanded terminals



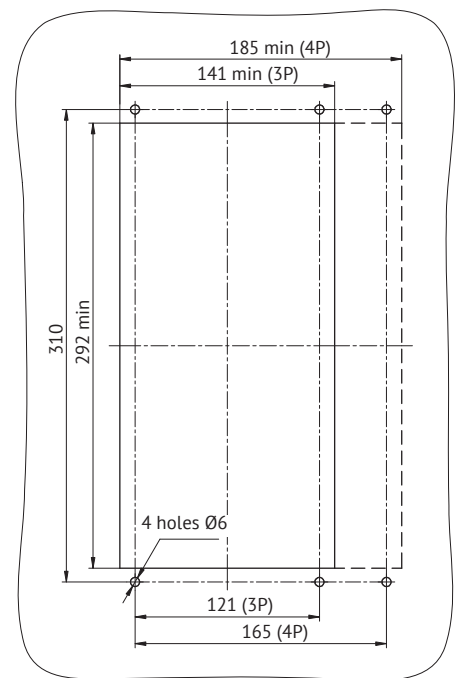
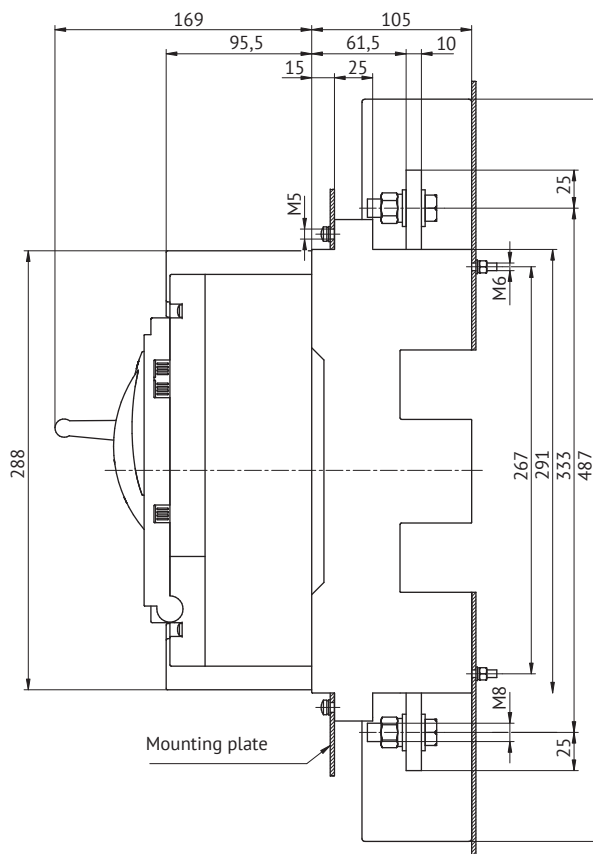
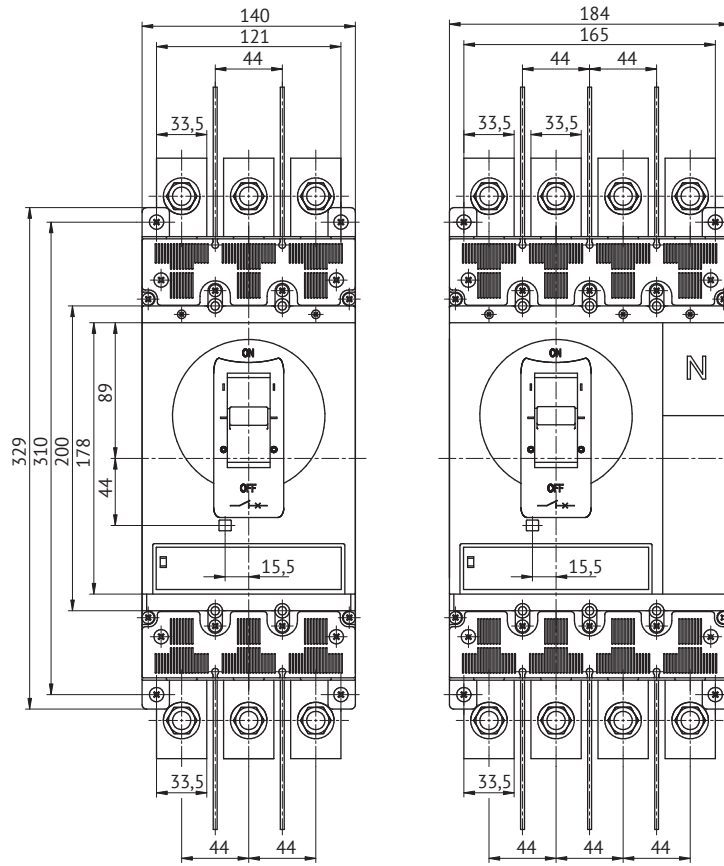
OptiMat T400-T630 with ERT rear terminals



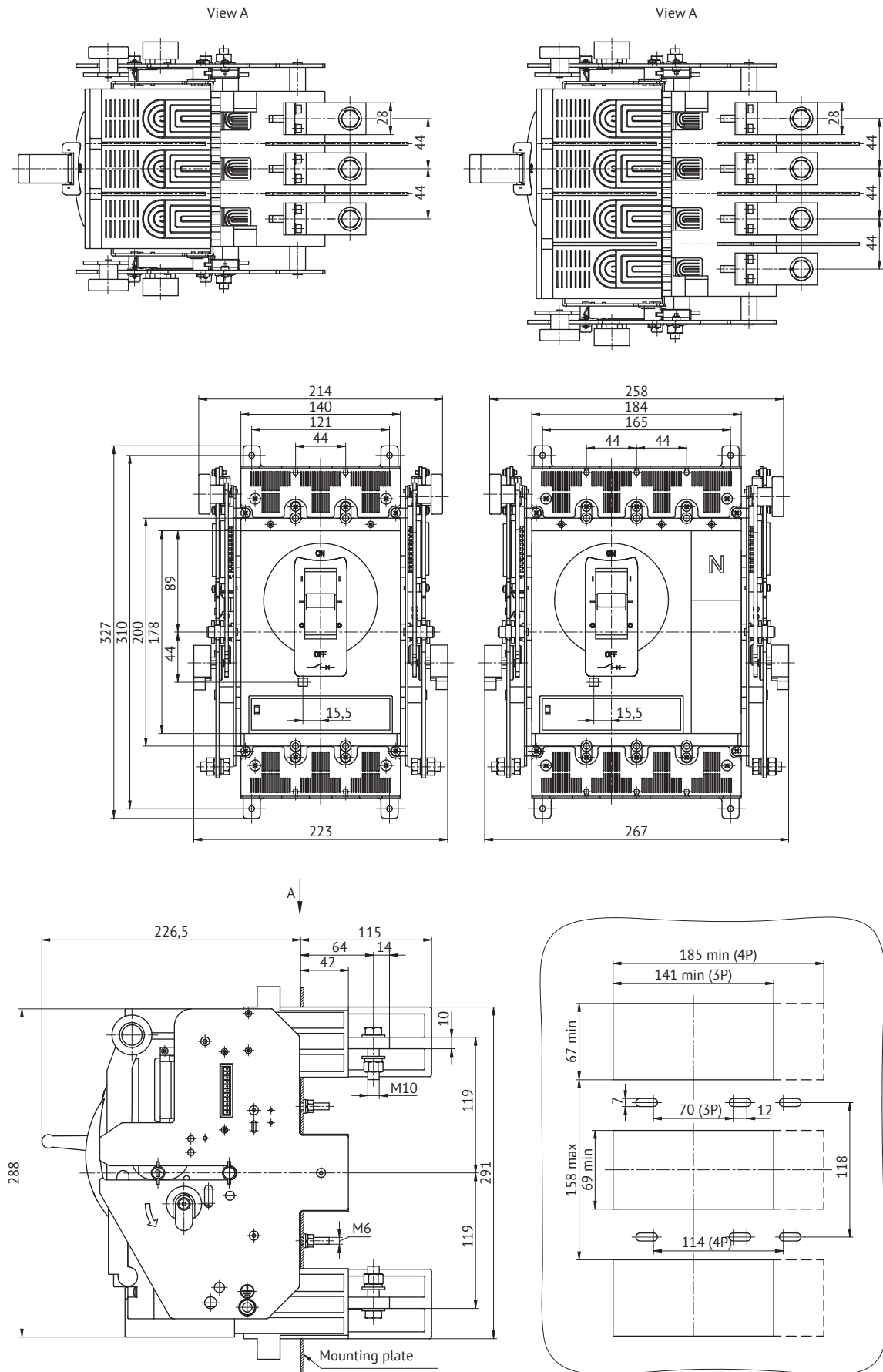
OptiMat T400-T630 plug-in rear connection



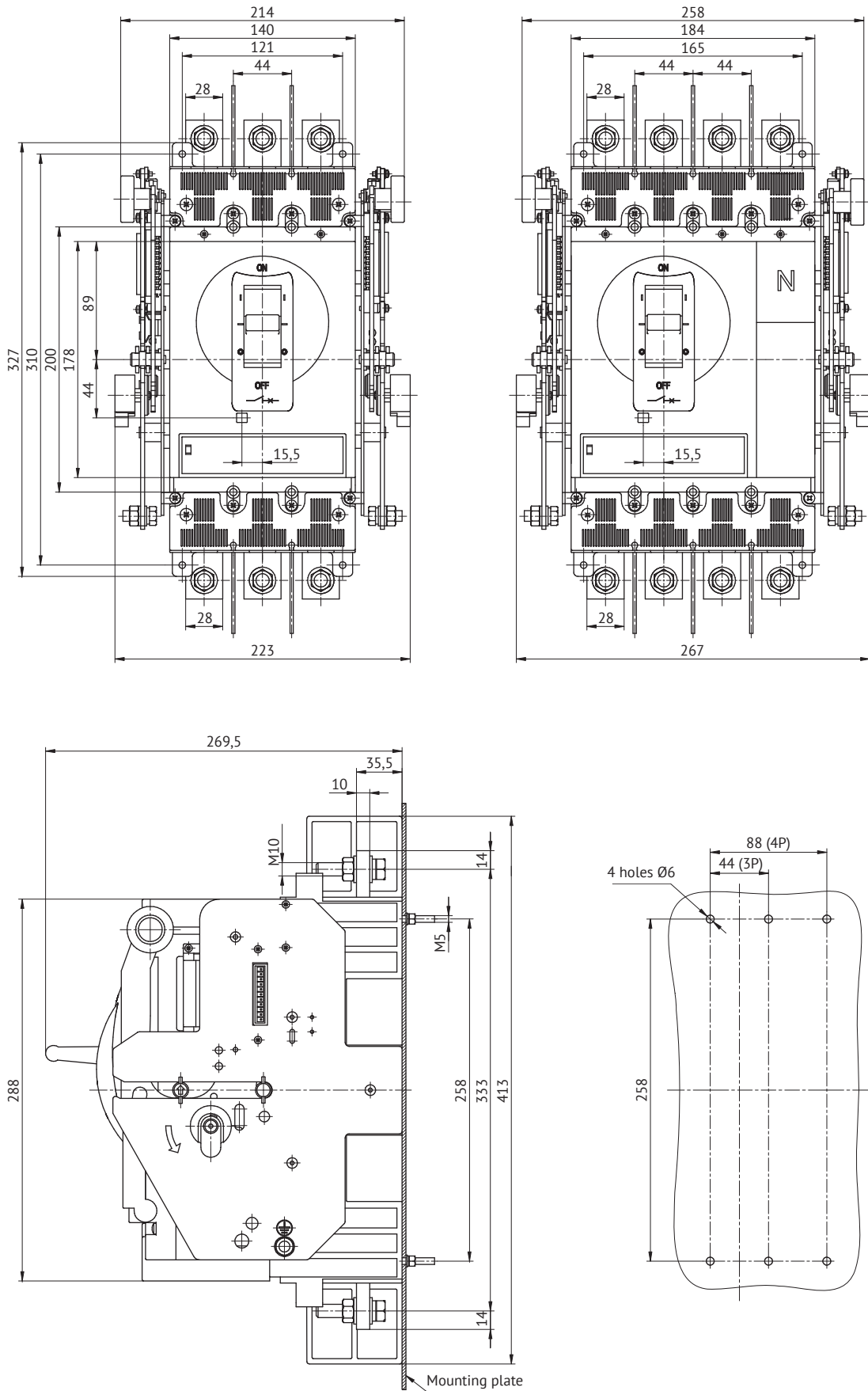
OptiMat T400-T630 plug-in front connection



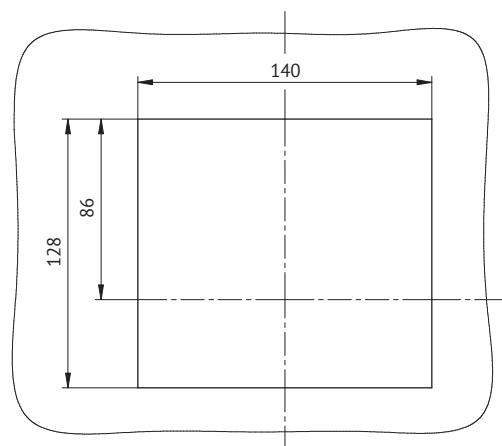
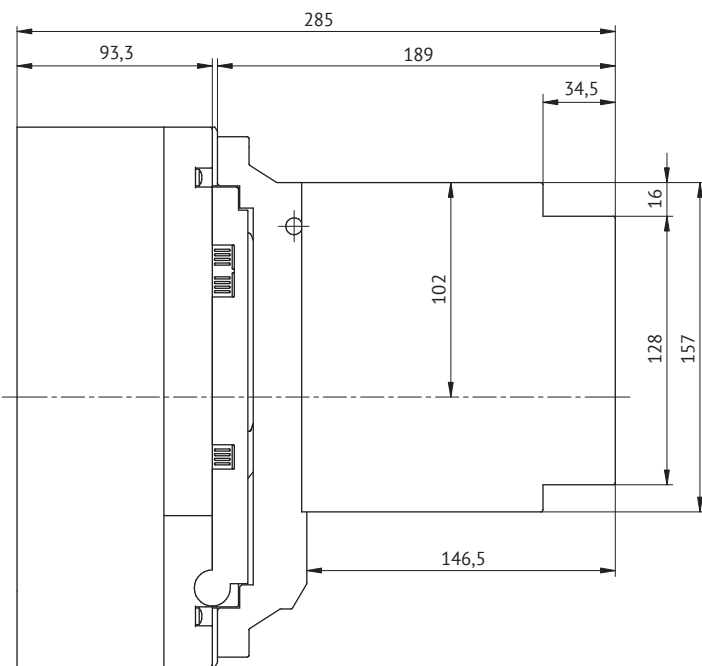
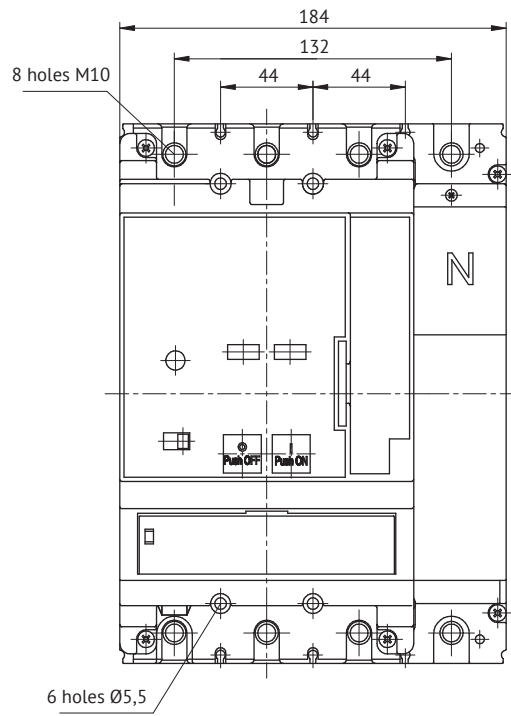
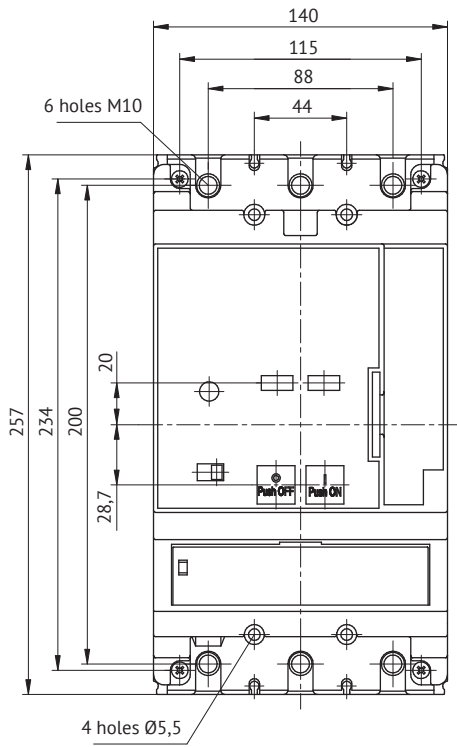
OptiMat T400-T630 withdrawable rear connection



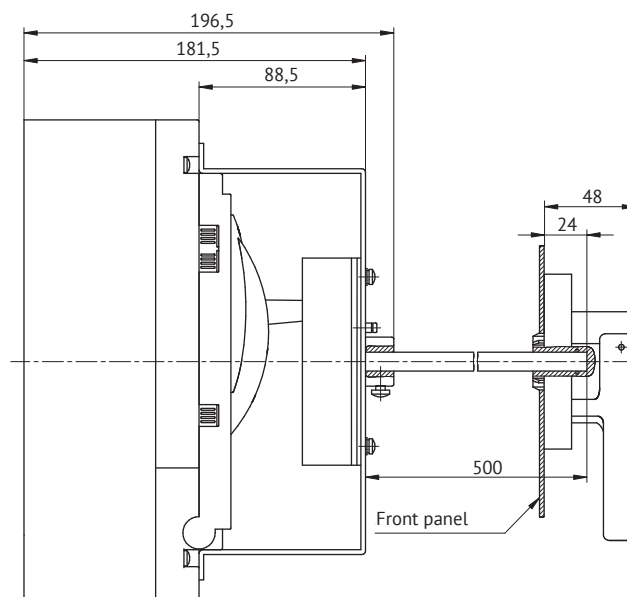
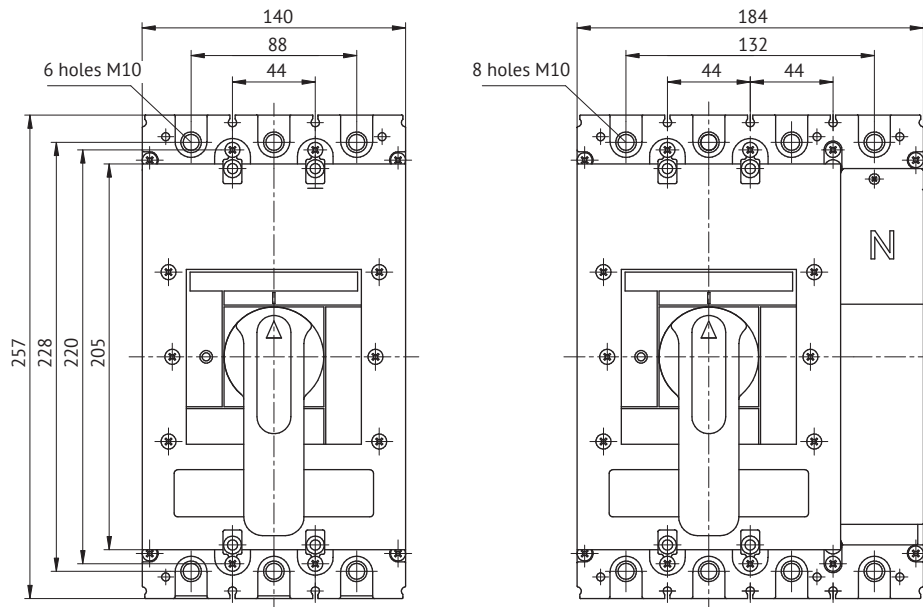
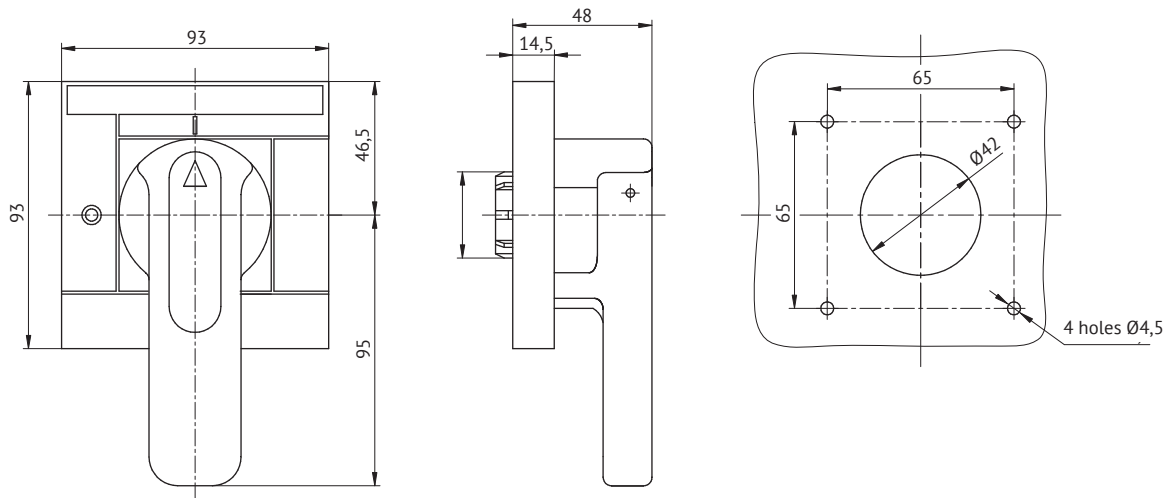
OptiMat T400-T630 withdrawable front connection



OptiMat T400-T630 with ESMO motor drive



OptiMat T400-T630 with RH-E external rotary handle



► Items

OptiMat T Version L

OptiMat T circuit breakers for distribution network protection

T125L...T630L (Icu=50kA) ETA release (functional release with measurement and indication of currents)

Standard size	Icu version	Release	In, A	Type	Code	
					3 poles	4 poles
T125	L	ETA	32	OptiMat T125L ETA 32A	355875	355883
			63	OptiMat T125L ETA 63A	355876	355884
			125	OptiMat T125L ETA 125A	355877	355885
T160			160	OptiMat T160L ETA 160A	355878	355886
T250			250	OptiMat T250L ETA 250A	355879	355887
T400			250	OptiMat T400L ETA 250A	355880	355888
			400	OptiMat T400L ETA 400A	355881	355889
T630			630	OptiMat T630L ETA 630A	355882	355890

T125L...T630L (Icu=50kA) ETA-COM release (functional release with measurement and indication of currents and data transmission)

Standard size	Icu version	Release	In, A	Type	Code	
					3 poles	4 poles
T125	L	ETA-COM	32	OptiMat T125L ETA-COM 32A	355891	355899
			63	OptiMat T125L ETA-COM 63A	355892	355900
			125	OptiMat T125L ETA-COM 125A	355893	355901
T160			160	OptiMat T160L ETA-COM 160A	355894	355902
T250			250	OptiMat T250L ETA-COM 250A	355895	355903
T400			250	OptiMat T400L ETA-COM 250A	355896	355904
			400	OptiMat T400L ETA-COM 400A	355897	355905
T630			630	OptiMat T630L ETA-COM 630A	355898	355906

T250L...T630L (Icu=50kA) ETE release (advanced release with voltage, power, energy and harmonics measurement, data indication and transmission)

Standard size	Icu version	Release	In, A	Type	Code	
					3 poles	4 poles
T250	L	ETE	100	OptiMat T250L ETE 100A	355923	355928
			250	OptiMat T250L ETE 250A	355924	355929
T400			250	OptiMat T400L ETE 250A	355925	355930
			400	OptiMat T400L ETE 400A	355926	355931
T630			630	OptiMat T630L ETE 630A	355927	355932

T125L...T630L (Icu=50kA) ETN release (basic release)

Standard size	Icu version	Release	In, A	Type	Code	
					3 poles	4 poles
T125	L	ETN	32	OptiMat T125L ETN 32A	355851	355859
			63	OptiMat T125L ETN 63A	355852	355860
			125	OptiMat T125L ETN 125A	355853	355861
T160			160	OptiMat T160L ETN 160A	355854	355862
T250			250	OptiMat T250L ETN 250A	355855	355863
			250	OptiMat T400L ETN 250A	355856	355864
T400			400	OptiMat T400L ETN 400A	355857	355865
			T630	630	OptiMat T630L ETN 630A	355858

T125L...T630L (Icu=50kA) TM release (thermomagnetic release with overload and short-circuit protection)

Standard size	Icu version	Release	In, A	Type	Code	
					3 poles	4 poles
T125	L	TM	16	OptiMat T125L TM 16A	355721	355742
			20	OptiMat T125L TM 20A	355722	355743
			25	OptiMat T125L TM 25A	355723	355744
			32	OptiMat T125L TM 32A	355724	355745
			40	OptiMat T125L TM 40A	355725	355746
			50	OptiMat T125L TM 50A	355726	355747
			63	OptiMat T125L TM 63A	355727	355748
			80	OptiMat T125L TM 80A	355728	355749
			100	OptiMat T125L TM 100A	355729	355750
			125	OptiMat T125L TM 125A	355730	355751
T160			160	OptiMat T160L TM 160A	355731	355752
			100	OptiMat T250L TM 100A	355732	355753
T250			125	OptiMat T250L TM 125A	355733	355754
			160	OptiMat T250L TM 160A	355734	355755
			200	OptiMat T250L TM 200A	355735	355756
			250	OptiMat T250L TM 250A	355736	355757
T400			250	OptiMat T400L TM 250A	355737	355758
			315	OptiMat T400L TM 315A	355738	355759
	400	OptiMat T400L TM 400A	355739	355760		
T630	500	OptiMat T630L TM 500A	355740	355761		
	630	OptiMat T630L TM 630A	355741	355762		

T125L...T630L (Icu=50kA) M release (electromagnetic release with short-circuit protection only)

Standard size	Icu version	Release	In, A	Type	Code	
					3 poles	4 poles
T125	L	M	16	OptiMat T125L M 16A	355763	355784
			20	OptiMat T125L M 20A	355764	355785
			25	OptiMat T125L M 25A	355765	355786
			32	OptiMat T125L M 32A	355766	355787
			40	OptiMat T125L M 40A	355767	355788
			50	OptiMat T125L M 50A	355768	355789
			63	OptiMat T125L M 63A	355769	355790
			80	OptiMat T125L M 80A	355770	355791
			100	OptiMat T125L M 100A	355771	355792
T160	L	M	125	OptiMat T125L M 125A	355772	355793
T250			160	OptiMat T160L M 160A	355773	355794
			100	OptiMat T250L M 100A	355774	355795
			125	OptiMat T250L M 125A	355775	355796
T400			160	OptiMat T250L M 160A	355776	355797
			200	OptiMat T250L M 200A	355777	355798
			250	OptiMat T250L M 250A	355778	355799
			250	OptiMat T400L M 250A	355779	355800
T630			315	OptiMat T400L M 315A	355780	355801
	400	OptiMat T400L M 400A	355781	355802		
	500	OptiMat T630L M 500A	355782	355803		
			630	OptiMat T630L M 630A	355783	355804

OptiMat T motor protection circuit breaker

T125L...T630L (Icu=50kA) ETA-M release (functional release for protection of electric motors with measurement and indication of currents)

Standard size	Icu version	Release	In, A	Type	Code
					3 poles
T125	L	ETA-M	32	OptiMat T125L ETA-M 32A	355907
			63	OptiMat T125L ETA-M 63A	355908
			125	OptiMat T125L ETA-M 125A	355909
T160			160	OptiMat T160L ETA-M 160A	355910
T250			250	OptiMat T250L ETA-M 250A	355911
			250	OptiMat T400L ETA-M 250A	355912
T400			400	OptiMat T400L ETA-M 400A	355913
			T630	630	OptiMat T630L ETA-M 630A

T125L...T630L (Icu=50kA) ETA-M-COM release (functional release for protection of electric motors with measurement and indication of currents and data transmission)

Standard size	Icu version	Release	In, A	Type	Code
					3 poles
T125	L	ETA-M-COM	32	OptiMat T125L ETA-M-COM 32A	355915
			63	OptiMat T125L ETA-M-COM 63A	355916
			125	OptiMat T125L ETA-M-COM 125A	355917
T160			160	OptiMat T160L ETA-M-COM 160A	355918
T250			250	OptiMat T250L ETA-M-COM 250A	355919
			250	OptiMat T400L ETA-M-COM 250A	355920
T400			400	OptiMat T400L ETA-M-COM 400A	355921
			T630	630	OptiMat T630L ETA-M-COM 630A

T250L...T630L (Icu=50kA) ETE-M release (advanced release for protection of electric motors with voltage, power, energy and harmonics measurement, data indication and transmission)

Standard size	Icu version	Release	In, A	Type	Code
					3 poles
T250	L	ETE-M	100	OptiMat T250L ETE-M 100A	355923
			250	OptiMat T250L ETE-M 250A	355924
T400			250	OptiMat T400L ETE-M 250A	355925
			400	OptiMat T400L ETE-M 400A	355926
T630			630	OptiMat T630L ETE-M 630A	355927

T125L...T630L (Icu=50kA) ETN-M release (basic release for motor protection)

Standard size	Icu version	Release	In, A	Type	Code
					3 poles
T125	L	ETN-M	32	OptiMat T125L ETN-M 32A	355867
			63	OptiMat T125L ETN-M 63A	355868
			125	OptiMat T125L ETN-M 125A	355869
T160			160	OptiMat T160L ETN-M 160A	355870
T250			250	OptiMat T250L ETN-M 250A	355871
			250	OptiMat T400L ETN-M 250A	355872
T400			400	OptiMat T400L ETN-M 400A	355873
			T630	630	OptiMat T630L ETN-M 630A

T125L...T630L (Icu=50kA) TM-M release (thermomagnetic release for electric motor protection with overload and short circuit protection)

Standard size	Icu version	Release	In, A	Type	Code
					3 poles
T125	L	TM-M	16	OptiMat T125L TM-M 16A	355805
			20	OptiMat T125L TM-M 20A	355806
			25	OptiMat T125L TM-M 25A	355807
			32	OptiMat T125L TM-M 32A	355808
			40	OptiMat T125L TM-M 40A	355809
			50	OptiMat T125L TM-M 50A	355810
			63	OptiMat T125L TM-M 63A	355811
			80	OptiMat T125L TM-M 80A	355812
100			OptiMat T125L TM-M 100A	355813	
125			OptiMat T125L TM-M 125A	355814	
T160			160	OptiMat T160L TM-M 160A	355815
T250			100	OptiMat T250L TM-M 100A	355816
			125	OptiMat T250L TM-M 125A	355817
			160	OptiMat T250L TM-M 160A	355818
			200	OptiMat T250L TM-M 200A	355819
			250	OptiMat T250L TM-M 250A	355820
T400	250	OptiMat T400L TM-M 250A	355821		
	315	OptiMat T400L TM-M 315A	355822		
	400	OptiMat T400L TM-M 400A	355823		
T630	500	OptiMat T630L TM-M 500A	355824		
	630	OptiMat T630L TM-M 630A	355825		

T125L...T630L (Icu=50kA) M-M release (electromagnetic release for protecting electric motors with short-circuit protection only)

Standard size	Icu version	Release	In, A	Type	Code	
					3 poles	
T125	L	M-M	1,5	OptiMat T125L M-M 1,5A	355826	
			2,5	OptiMat T125L M-M 2,5A	355827	
			6	OptiMat T125L M-M 6A	355828	
			10	OptiMat T125L M-M 10A	355829	
			16	OptiMat T125L M-M 16A	355830	
			20	OptiMat T125L M-M 20A	355831	
			25	OptiMat T125L M-M 25A	355832	
			32	OptiMat T125L M-M 32A	355833	
			40	OptiMat T125L M-M 40A	355834	
			50	OptiMat T125L M-M 50A	355835	
			63	OptiMat T125L M-M 63A	355836	
			80	OptiMat T125L M-M 80A	355837	
			100	OptiMat T125L M-M 100A	355838	
			125	OptiMat T125L M-M 125A	355839	
			T160	160	OptiMat T160L M-M 160A	355840
			T250	100	OptiMat T250L M-M 100A	355841
125				OptiMat T250L M-M 125A	355842	
160				OptiMat T250L M-M 160A	355843	
200				OptiMat T250L M-M 200A	355844	
250				OptiMat T250L M-M 250A	355845	
T400			250	OptiMat T400L M-M 250A	355846	
			315	OptiMat T400L M-M 315A	355847	
			400	OptiMat T400L M-M 400A	355848	
T630			500	OptiMat T630L M-M 500A	355849	
			630	OptiMat T630L M-M 630A	355850	

OptiMat T circuit breakers with leakage current protection unit for distribution network protection

T125L...T630L (Icu=50kA) -RCA (leakage current protection unit) ETA release (functional release with measurement and indication of currents)

Standard size	Icu version	Leakage protection unit	Release	In, A	Type	Code
						4 poles
T125	L	RCA	ETA	32	OptiMat T125L-RCA ETA 32A	356986
				63	OptiMat T125L-RCA ETA 63A	356987
				125	OptiMat T125L-RCA ETA 125A	356988
T250				250	OptiMat T250L-RCA ETA 250A	356989
T400				400	OptiMat T400L-RCA ETA 400A	356990
T630				630	OptiMat T630L-RCA ETA 630A	356991

T125L...T630L (Icu=50kA) -RCA (leakage current protection unit) ETA-COM release (functional release with measurement and indication of currents and data transmission)

Standard size	Icu version	Leakage protection unit	Release	In, A	Type	Code
						4 poles
T125	L	RCA	ETA-COM	32	OptiMat T125L-RCA ETA-COM 32A	356992
				63	OptiMat T125L-RCA ETA-COM 63A	356993
				125	OptiMat T125L-RCA ETA-COM 125A	356994
T250				250	OptiMat T250L-RCA ETA-COM 250A	356995
T400				400	OptiMat T400L-RCA ETA-COM 400A	356996
T630				630	OptiMat T630L-RCA ETA-COM 630A	356997

T250L...T630L (Icu=50kA) -RCA (leakage current protection unit) ETE release (advanced release with voltage, power, energy and harmonics measurement, data indication and transmission)

Standard size	Icu version	Leakage protection unit	Release	In, A	Type	Code
						4 poles
T250	L	RCA	ETE	100	OptiMat T250L-RCA ETE 100A 4P	356998
				250	OptiMat T250L-RCA ETE 250A 4P	356999
T400				400	OptiMat T400L-RCA ETE 400A 4P	357000
T630				630	OptiMat T630L-RCA ETE 630A 4P	357001

T125L...T630L (Icu=50kA) -RCA (leakage current protection unit) ETN release (basic release)

Standard size	Icu version	Leakage protection unit	Release	In, A	Type	Code
						4 poles
T125	L	RCA	ETN	32	OptiMat T125L-RCA ETN 32A	356980
				63	OptiMat T125L-RCA ETN 63A	356981
				125	OptiMat T125L-RCA ETN 125A	356982
T250				250	OptiMat T250L-RCA ETN 250A	356983
T400				400	OptiMat T400L-RCA ETN 400A	356984
T630				630	OptiMat T630L-RCA ETN 630A	356985

T125L...T630L (Icu=50kA) -RCA (leakage current protection unit) TM release (thermomagnetic release with overload and short circuit protection)

Standard size	Icu version	Leakage protection unit	Release	In, A	Type	Code	
						4 poles	
T125	L	RCA	TM	16	OptiMat T125L-RCA TM 16A	356963	
				20	OptiMat T125L-RCA TM 20A	356964	
				25	OptiMat T125L-RCA TM 25A	356965	
				32	OptiMat T125L-RCA TM 32A	356966	
				40	OptiMat T125L-RCA TM 40A	356967	
				50	OptiMat T125L-RCA TM 50A	356968	
				63	OptiMat T125L-RCA TM 63A	356969	
				80	OptiMat T125L-RCA TM 80A	356970	
				100	OptiMat T125L-RCA TM 100A	356971	
				125	OptiMat T125L-RCA TM 125A	356972	
				T250	160	OptiMat T250L-RCA TM 160A	356973
					200	OptiMat T250L-RCA TM 200A	356974
					250	OptiMat T250L-RCA TM 250A	356975
				T400	315	OptiMat T400L-RCA TM 315A	356976
400	OptiMat T400L-RCA TM 400A	356977					
T630	500	OptiMat T630L-RCA TM 500A	356978				
	630	OptiMat T630L-RCA TM 630A	356979				

OptiMat T Version M

OptiMat T circuit breakers for distribution network protection

T125M...T630M (Icu=85kA) ETA release (functional release with measurement and indication of currents)

Standard size	Icu version	Release	In, A	Type	Code	
					3 poles	4 poles
T125	M	ETA	32	OptiMat T125M ETA 32A	356092	356100
			63	OptiMat T125M ETA 63A	356093	356101
			125	OptiMat T125M ETA 125A	356094	356102
T160			160	OptiMat T160M ETA 160A	356095	356103
T250			250	OptiMat T250M ETA 250A	356096	356104
T400			250	OptiMat T400M ETA 250A	356097	356105
			400	OptiMat T400M ETA 400A	356098	356106
T630	630	OptiMat T630M ETA 630A	356099	356107		

T125M...T630M (Icu=85kA) ETA-COM release (functional release with measurement and indication of currents and data transmission)

Standard size	Icu version	Release	In, A	Type	Code	
					3 poles	4 poles
T125	M	ETA-COM	32	OptiMat T125M ETA-COM 32A	356108	356116
			63	OptiMat T125M ETA-COM 63A	356109	356117
			125	OptiMat T125M ETA-COM 125A	356110	356118
T160			160	OptiMat T160M ETA-COM 160A	356111	356119
T250			250	OptiMat T250M ETA-COM 250A	356112	356120
T400			250	OptiMat T400M ETA-COM 250A	356113	356121
			400	OptiMat T400M ETA-COM 400A	356114	356122
T630	630	OptiMat T630M ETA-COM 630A	356115	356123		

T250M...T630M (Icu=85kA) ETE release (advanced release with voltage, power, energy and harmonics measurement, data indication and transmission)

Standard size	Icu version	Release	In, A	Type	Code	
					3 poles	4 poles
T250	M	ETE	100	OptiMat T250M ETE 100A	356140	356145
			250	OptiMat T250M ETE 250A	356141	356146
T400			250	OptiMat T400M ETE 250A	356142	356147
T630			400	OptiMat T400M ETE 400A	356143	356148
			630	OptiMat T630M ETE 630A	356144	356149

T125M...T630M (Icu=85kA) ETN release (basic release)

Standard size	Icu version	Release	In, A	Type	Code	
					3 poles	4 poles
T125	M	ETN	32	OptiMat T125M ETN 32A	356068	356076
			63	OptiMat T125M ETN 63A	356069	356077
			125	OptiMat T125M ETN 125A	356070	356078
T160			160	OptiMat T160M ETN 160A	356071	356079
T250			250	OptiMat T250M ETN 250A	356072	356080
T400			250	OptiMat T400M ETN 250A	356073	356081
			400	OptiMat T400M ETN 400A	356074	356082
T630	630	OptiMat T630M ETN 630A	356075	356083		

T125M...T630M (Icu=85kA) TM release (thermomagnetic release with overload and short-circuit protection)

Standard size	Icu version	Release	In, A	Type	Code	
					3 poles	4 poles
T125	M	TM	16	OptiMat T125M TM 16A	355938	355959
			20	OptiMat T125M TM 20A	355939	355960
			25	OptiMat T125M TM 25A	355940	355961
			32	OptiMat T125M TM 32A	355941	355962
			40	OptiMat T125M TM 40A	355942	355963
			50	OptiMat T125M TM 50A	355943	355964
			63	OptiMat T125M TM 63A	355944	355965
80			OptiMat T125M TM 80A	355945	355966	
100			OptiMat T125M TM 100A	355946	355967	
125			OptiMat T125M TM 125A	355947	355968	
T160			160	OptiMat T160M TM 160A	355948	355969
T250			100	OptiMat T250M TM 100A	355949	355970
			125	OptiMat T250M TM 125A	355950	355971
			160	OptiMat T250M TM 160A	355951	355972
	200	OptiMat T250M TM 200A	355952	355973		
T400	250	OptiMat T250M TM 250A	355953	355974		
	250	OptiMat T400M TM 250A	355954	355975		
	315	OptiMat T400M TM 315A	355955	355976		
T630	400	OptiMat T400M TM 400A	355956	355977		
	500	OptiMat T630M TM 500A	355957	355978		
	630	OptiMat T630M TM 630A	355958	355979		

T125M...T630M (Icu=85kA) M release (electromagnetic release with short-circuit protection only)

Standard size	Icu version	Release	In, A	Type	Code	
					3 poles	4 poles
T125	M	M	16	OptiMat T125M M 16A	355980	356001
			20	OptiMat T125M M 20A	355981	356002
			25	OptiMat T125M M 25A	355982	356003
			32	OptiMat T125M M 32A	355983	356004
			40	OptiMat T125M M 40A	355984	356005
			50	OptiMat T125M M 50A	355985	356006
			63	OptiMat T125M M 63A	355986	356007
			80	OptiMat T125M M 80A	355987	356008
T160	M	M	100	OptiMat T125M M 100A	355988	356009
			125	OptiMat T125M M 125A	355989	356010
T250	M	M	160	OptiMat T160M M 160A	355990	356011
			100	OptiMat T250M M 100A	355991	356012
			125	OptiMat T250M M 125A	355992	356013
			160	OptiMat T250M M 160A	355993	356014
T400	M	M	200	OptiMat T250M M 200A	355994	356015
			250	OptiMat T250M M 250A	355995	356016
			250	OptiMat T400M M 250A	355996	356017
T630	M	M	315	OptiMat T400M M 315A	355997	356018
			400	OptiMat T400M M 400A	355998	356019
			500	OptiMat T630M M 500A	355999	356020
			630	OptiMat T630M M 630A	356000	356021

OptiMat T motor protection circuit breakers

T125M...T630M (Icu=85kA) ETA-M release (functional release for protection of electric motors with measurement and indication of currents)

Standard size	Icu version	Release	In, A	Type	Code
					3 poles
T125	M	ETA-M	32	OptiMat T125M ETA-M 32A	356124
			63	OptiMat T125M ETA-M 63A	356125
			125	OptiMat T125M ETA-M 125A	356126
T160	M	ETA-M	160	OptiMat T160M ETA-M 160A	356127
T250			250	OptiMat T250M ETA-M 250A	356128
T400	M	ETA-M	250	OptiMat T400M ETA-M 250A	356129
			400	OptiMat T400M ETA-M 400A	356130
T630	M	ETA-M	630	OptiMat T630M ETA-M 630A	356131

T125M...T630M (Icu=85kA) ETA-M-COM release (functional release for protection of electric motors with measurement and indication of currents and data transmission)

Standard size	Icu version	Release	In, A	Type	Code
					3 poles
T125	M	ETA-M-COM	32	OptiMat T125M ETA-M-COM 32A	356132
			63	OptiMat T125M ETA-M-COM 63A	356133
			125	OptiMat T125M ETA-M-COM 125A	356134
T160	M	ETA-M-COM	160	OptiMat T160M ETA-M-COM 160A	356135
T250			250	OptiMat T250M ETA-M-COM 250A	356136
T400	M	ETA-M-COM	250	OptiMat T400M ETA-M-COM 250A	356137
			400	OptiMat T400M ETA-M-COM 400A	356138
T630	M	ETA-M-COM	630	OptiMat T630M ETA-M-COM 630A	356139

T250M...T630M (Icu=85kA) ETE-M release (advanced release for protection of electric motors with voltage, power, energy and harmonics measurement, data indication and transmission)

Standard size	Icu version	Release	In, A	Type	Code
					3 poles
T250	M	ETE-M	100	OptiMat T250M ETE-M 100A	356150
			250	OptiMat T250M ETE-M 250A	356151
T400	M	ETE-M	250	OptiMat T400M ETE-M 250A	356152
			400	OptiMat T400M ETE-M 400A	356153
T630	M	ETE-M	630	OptiMat T630M ETE-M 630A	356154

T125M...T630M (Icu=85kA) ETN-M release (basic release for motor protection)

Standard size	Icu version	Release	In, A	Type	Code
					3 poles
T125	M	ETN-M	32	OptiMat T125M ETN-M 32A	356084
			63	OptiMat T125M ETN-M 63A	356085
			125	OptiMat T125M ETN-M 125A	356086
T160	M	ETN-M	160	OptiMat T160M ETN-M 160A	356087
T250			250	OptiMat T250M ETN-M 250A	356088
T400	M	ETN-M	250	OptiMat T400M ETN-M 250A	356089
			400	OptiMat T400M ETN-M 400A	356090
T630	M	ETN-M	630	OptiMat T630M ETN-M 630A	356091

T125M...T630M (Icu=85kA) TM-M release (thermomagnetic release for electric motor protection with overload and short circuit protection)

Standard size	Icu version	Release	In, A	Type	Code
					3 poles
T125	M	TM-M	16	OptiMat T125M TM-M 16A	356022
			20	OptiMat T125M TM-M 20A	356023
			25	OptiMat T125M TM-M 25A	356024
			32	OptiMat T125M TM-M 32A	356025
			40	OptiMat T125M TM-M 40A	356026
			50	OptiMat T125M TM-M 50A	356027
			63	OptiMat T125M TM-M 63A	356028
			80	OptiMat T125M TM-M 80A	356029
100			OptiMat T125M TM-M 100A	356030	
125			OptiMat T125M TM-M 125A	356031	
T160			160	OptiMat T160M TM-M 160A	356032
T250			100	OptiMat T250M TM-M 100A	356033
			125	OptiMat T250M TM-M 125A	356034
			160	OptiMat T250M TM-M 160A	356035
			200	OptiMat T250M TM-M 200A	356036
			250	OptiMat T250M TM-M 250A	356037
T400	250	OptiMat T400M TM-M 250A	356038		
	315	OptiMat T400M TM-M 315A	356039		
	400	OptiMat T400M TM-M 400A	356040		
T630	500	OptiMat T630M TM-M 500A	356041		
	630	OptiMat T630M TM-M 630A	356042		

T125M...T630M (Icu=85kA) release (electromagnetic release for electric motor protection with short-circuit protection only)

Standard size	Icu version	Release	In, A	Type	Code	
					3 poles	
T125	M	M-M	1,5	OptiMat T125M M-M 1,5A	356043	
			2,5	OptiMat T125M M-M 2,5A	356044	
			6	OptiMat T125M M-M 6A	356045	
			10	OptiMat T125M M-M 10A	356046	
			16	OptiMat T125M M-M 16A	356047	
			20	OptiMat T125M M-M 20A	356048	
			25	OptiMat T125M M-M 25A	356049	
			32	OptiMat T125M M-M 32A	356050	
			40	OptiMat T125M M-M 40A	356051	
			50	OptiMat T125M M-M 50A	356052	
			63	OptiMat T125M M-M 63A	356053	
			80	OptiMat T125M M-M 80A	356054	
			100	OptiMat T125M M-M 100A	356055	
			125	OptiMat T125M M-M 125A	356056	
			T160	160	OptiMat T160M M-M 160A	356057
			T250	100	OptiMat T250M M-M 100A	356058
125	OptiMat T250M M-M 125A	356059				
160	OptiMat T250M M-M 160A	356060				
200	OptiMat T250M M-M 200A	356061				
250	OptiMat T250M M-M 250A	356062				
T400	250	OptiMat T400M M-M 250A	356063			
	315	OptiMat T400M M-M 315A	356064			
	400	OptiMat T400M M-M 400A	356065			
T630	500	OptiMat T630M M-M 500A	356066			
	630	OptiMat T630M M-M 630A	356067			

OptiMat T circuit breakers with leakage current protection unit for distribution network protection

T125M...T630M (Icu=85kA) -RCA (leakage current protection unit) ETA release (functional release with measurement and indication of currents)

Standard size	Icu version	Leakage protection unit	Release	In, A	Type	Code
						4 poles
T125	M	RCA	ETA	32	OptiMat T125M-RCA ETA 32A	357025
				63	OptiMat T125M-RCA ETA 63A	357026
T250				125	OptiMat T125M-RCA ETA 125A	357027
T400				250	OptiMat T250M-RCA ETA 250A	357028
				400	OptiMat T400M-RCA ETA 400A	357029
T630				630	OptiMat T630M-RCA ETA 630A	357030

T125M...T630M (Icu=85kA) -RCA (leakage current protection unit) ETA-COM release (functional release with measurement and indication of currents and data transmission)

Standard size	Icu version	Leakage protection unit	Release	In, A	Type	Code
						4 poles
T125	M	RCA	ETA-COM	32	OptiMat T125M-RCA ETA-COM 32A	357031
				63	OptiMat T125M-RCA ETA-COM 63A	357032
				125	OptiMat T125M-RCA ETA-COM 125A	357033
T250				250	OptiMat T250M-RCA ETA-COM 250A	357034
T400				400	OptiMat T400M-RCA ETA-COM 400A	357035
T630				630	OptiMat T630M-RCA ETA-COM 630A	357036

T250M...T630M (Icu=85kA) -RCA (leakage current protection unit) ETE release (advanced release with voltage, power, energy and harmonics measurement, data indication and transmission)

Standard size	Icu version	Leakage protection unit	Release	In, A	Type	Code
						4 poles
T250	M	RCA	ETE	100	OptiMat T250M-RCA ETE 100A 4P	357037
				250	OptiMat T250M-RCA ETE 250A 4P	357038
T400				400	OptiMat T400M-RCA ETE 400A 4P	357039
T630				630	OptiMat T630M-RCA ETE 630A 4P	357040

T125M...T630M (Icu=85kA) -RCA (leakage current protection unit) ETN release (basic release)

Standard size	Icu version	Leakage protection unit	Release	In, A	Type	Code
						4 poles
T125	M	RCA	ETN	32	OptiMat T125M-RCA ETN 32A	357019
				63	OptiMat T125M-RCA ETN 63A	357020
				125	OptiMat T125M-RCA ETN 125A	357021
T250				250	OptiMat T250M-RCA ETN 250A	357022
T400				400	OptiMat T400M-RCA ETN 400A	357023
T630				630	OptiMat T630M-RCA ETN 630A	357024

T125M...T630M (Icu=85kA) -RCA (leakage current protection unit) TM release (thermomagnetic release with overload and short circuit protection)

Standard size	Icu version	Leakage protection unit	Release	In, A	Type	Code						
						4 poles						
T125	M	RCA	TM	16	OptiMat T125M-RCA TM 16A	357002						
				20	OptiMat T125M-RCA TM 20A	357003						
				25	OptiMat T125M-RCA TM 25A	357004						
				32	OptiMat T125M-RCA TM 32A	357005						
				40	OptiMat T125M-RCA TM 40A	357006						
				50	OptiMat T125M-RCA TM 50A	357007						
				63	OptiMat T125M-RCA TM 63A	357008						
				80	OptiMat T125M-RCA TM 80A	357009						
				100	OptiMat T125M-RCA TM 100A	357010						
				125	OptiMat T125M-RCA TM 125A	357011						
				T250	M	RCA	TM	160	OptiMat T250M-RCA TM 160A	357012		
								200	OptiMat T250M-RCA TM 200A	357013		
250	OptiMat T250M-RCA TM 250A	357014										
T400	M	RCA	TM	315				OptiMat T400M-RCA TM 315A	357015			
				400				OptiMat T400M-RCA TM 400A	357016			
T630				M				RCA	TM	500	OptiMat T630M-RCA TM 500A	357017
										630	OptiMat T630M-RCA TM 630A	357018

OptiMat T Version H

OptiMat T circuit breakers for distribution network protection

T125H...T630H (Icu=100kA) ETA release (functional release with measurement and indication of currents)

Standard size	Icu version	Release	In, A	Type	Code	
					3 poles	4 poles
T125	H	ETA	32	OptiMat T125H ETA 32A	356309	356317
			63	OptiMat T125H ETA 63A	356310	356318
			125	OptiMat T125H ETA 125A	356311	356319
T160			160	OptiMat T160H ETA 160A	356312	356320
T250			250	OptiMat T250H ETA 250A	356313	356321
T400			250	OptiMat T400H ETA 250A	356314	356322
			400	OptiMat T400H ETA 400A	356315	356323
T630	630	OptiMat T630H ETA 630A	356316	356324		

T125H...T630H (Icu=100kA) ETA-COM release (functional release with measurement and indication of currents and data transmission)

Standard size	Icu version	Release	In, A	Type	Code	
					3 poles	4 poles
T125	H	ETA-COM	32	OptiMat T125H ETA-COM 32A	356325	356333
			63	OptiMat T125H ETA-COM 63A	356326	356334
			125	OptiMat T125H ETA-COM 125A	356327	356335
T160			160	OptiMat T160H ETA-COM 160A	356328	356336
T250			250	OptiMat T250H ETA-COM 250A	356329	356337
T400			250	OptiMat T400H ETA-COM 250A	356330	356338
			400	OptiMat T400H ETA-COM 400A	356331	356339
T630	630	OptiMat T630H ETA-COM 630A	356332	356340		

T250H...T630H (Icu=100kA) ETE release (advanced release with voltage, power, energy and harmonics measurement, data indication and transmission)

Standard size	Icu version	Release	In, A	Type	Code	
					3 poles	4 poles
T250	H	ETE	100	OptiMat T250H ETE 100A	356357	356362
			250	OptiMat T250H ETE 250A	356358	356363
T400			250	OptiMat T400H ETE 250A	356359	356364
T630			400	OptiMat T400H ETE 400A	356360	356365
			630	OptiMat T630H ETE 630A	356361	356366

T125H...T630H (Icu=100kA) ETN release (basic release)

Standard size	Icu version	Release	In, A	Type	Code	
					3 poles	4 poles
T125	H	ETN	32	OptiMat T125H ETN 32A	356285	356293
			63	OptiMat T125H ETN 63A	356286	356294
			125	OptiMat T125H ETN 125A	356287	356295
T160			160	OptiMat T160H ETN 160A	356288	356296
T250			250	OptiMat T250H ETN 250A	356289	356297
T400			250	OptiMat T400H ETN 250A	356290	356298
			400	OptiMat T400H ETN 400A	356291	356299
T630	630	OptiMat T630H ETN 630A	356292	356300		

T125H...T630H (Icu=100kA) TM release (thermomagnetic release with overload and short-circuit protection)

Standard size	Icu version	Release	In, A	Type	Code	
					3 poles	4 poles
T125	H	TM	16	OptiMat T125H TM 16A	356155	356176
			20	OptiMat T125H TM 20A	356156	356177
			25	OptiMat T125H TM 25A	356157	356178
			32	OptiMat T125H TM 32A	356158	356179
			40	OptiMat T125H TM 40A	356159	356180
			50	OptiMat T125H TM 50A	356160	356181
			63	OptiMat T125H TM 63A	356161	356182
T160			80	OptiMat T125H TM 80A	356162	356183
			100	OptiMat T125H TM 100A	356163	356184
T250			125	OptiMat T125H TM 125A	356164	356185
			160	OptiMat T160H TM 160A	356165	356186
			100	OptiMat T250H TM 100A	356166	356187
			125	OptiMat T250H TM 125A	356167	356188
T400			160	OptiMat T250H TM 160A	356168	356189
	200	OptiMat T250H TM 200A	356169	356190		
	250	OptiMat T250H TM 250A	356170	356191		
T630	250	OptiMat T400H TM 250A	356171	356192		
	315	OptiMat T400H TM 315A	356172	356193		
T630	400	OptiMat T400H TM 400A	356173	356194		
	500	OptiMat T630H TM 500A	356174	356195		
	630	OptiMat T630H TM 630A	356175	356196		

T125H...T630H (Icu=100kA) M release (electromagnetic release with short-circuit protection only)

Standard size	Icu version	Release	In, A	Type	Code	
					3 poles	4 poles
T125	H	M	16	OptiMat T125H M 16A	356197	356218
			20	OptiMat T125H M 20A	356198	356219
			25	OptiMat T125H M 25A	356199	356220
			32	OptiMat T125H M 32A	356200	356221
			40	OptiMat T125H M 40A	356201	356222
			50	OptiMat T125H M 50A	356202	356223
			63	OptiMat T125H M 63A	356203	356224
			80	OptiMat T125H M 80A	356204	356225
T160	H	M	100	OptiMat T125H M 100A	356205	356226
			125	OptiMat T125H M 125A	356206	356227
T250	H	M	160	OptiMat T160H M 160A	356207	356228
			100	OptiMat T250H M 100A	356208	356229
			125	OptiMat T250H M 125A	356209	356230
			160	OptiMat T250H M 160A	356210	356231
T400	H	M	200	OptiMat T250H M 200A	356211	356232
			250	OptiMat T250H M 250A	356212	356233
			250	OptiMat T400H M 250A	356213	356234
T630	H	M	315	OptiMat T400H M 315A	356214	356235
			400	OptiMat T400H M 400A	356215	356236
			500	OptiMat T630H M 500A	356216	356237
			630	OptiMat T630H M 630A	356217	356238

OptiMat T motor protection circuit breakers

T125H...T630H (Icu=100kA) ETA-M release (functional release for protection of electric motors with measurement and indication of currents)

Standard size	Icu version	Release	In, A	Type	Code
					3 poles
T125	H	ETA-M	32	OptiMat T125H ETA-M 32A	356341
			63	OptiMat T125H ETA-M 63A	356342
			125	OptiMat T125H ETA-M 125A	356343
T160	H	ETA-M	160	OptiMat T160H ETA-M 160A	356344
T250			250	OptiMat T250H ETA-M 250A	356345
T400	H	ETA-M	250	OptiMat T400H ETA-M 250A	356346
			400	OptiMat T400H ETA-M 400A	356347
T630	H	ETA-M	630	OptiMat T630H ETA-M 630A	356348

T125H...T630H (Icu=100kA) ETA-M-COM release (functional release for protection of electric motors with measurement and indication of currents and data transmission)

Standard size	Icu version	Release	In, A	Type	Code
					3 poles
T125	H	ETA-M-COM	32	OptiMat T125H ETA-M-COM 32A	356349
			63	OptiMat T125H ETA-M-COM 63A	356350
			125	OptiMat T125H ETA-M-COM 125A	356351
T160	H	ETA-M-COM	160	OptiMat T160H ETA-M-COM 160A	356352
T250			250	OptiMat T250H ETA-M-COM 250A	356353
T400	H	ETA-M-COM	250	OptiMat T400H ETA-M-COM 250A	356354
			400	OptiMat T400H ETA-M-COM 400A	356355
T630	H	ETA-M-COM	630	OptiMat T630H ETA-M-COM 630A	356356

T250H...T630H (Icu=100kA) ETE-M release (advanced release for protection of electric motors with voltage, power, energy and harmonics measurement, data indication and transmission)

Standard size	Icu version	Release	In, A	Type	Code
					3 poles
T250	H	ETE-M	100	OptiMat T250H ETE-M 100A	356367
			250	OptiMat T250H ETE-M 250A	356368
T400	H	ETE-M	250	OptiMat T400H ETE-M 250A	356369
			400	OptiMat T400H ETE-M 400A	356370
T630	H	ETE-M	630	OptiMat T630H ETE-M 630A	356371

T125H...T630H (Icu=100kA) ETN-M release (basic release for motor protection)

Standard size	Icu version	Release	In, A	Type	Code
					3 poles
T125	H	ETN-M	32	OptiMat T125H ETN-M 32A	356301
			63	OptiMat T125H ETN-M 63A	356302
			125	OptiMat T125H ETN-M 125A	356303
T160	H	ETN-M	160	OptiMat T160H ETN-M 160A	356304
T250			250	OptiMat T250H ETN-M 250A	356305
T400	H	ETN-M	250	OptiMat T400H ETN-M 250A	356306
			400	OptiMat T400H ETN-M 400A	356307
T630	H	ETN-M	630	OptiMat T630H ETN-M 630A	356308

T125H...T630H (Icu=100kA) TM-M release (thermomagnetic release for electric motor protection with overload and short circuit protection)

Standard size	Icu version	Release	In, A	Type	Code
					3 poles
T125	H	TM-M	16	OptiMat T125H TM-M 16A	356239
			20	OptiMat T125H TM-M 20A	356240
			25	OptiMat T125H TM-M 25A	356241
			32	OptiMat T125H TM-M 32A	356242
			40	OptiMat T125H TM-M 40A	356243
			50	OptiMat T125H TM-M 50A	356244
			63	OptiMat T125H TM-M 63A	356245
			80	OptiMat T125H TM-M 80A	356246
100			OptiMat T125H TM-M 100A	356247	
125			OptiMat T125H TM-M 125A	356248	
T160			160	OptiMat T160H TM-M 160A	356249
T250			100	OptiMat T250H TM-M 100A	356250
			125	OptiMat T250H TM-M 125A	356251
			160	OptiMat T250H TM-M 160A	356252
			200	OptiMat T250H TM-M 200A	356253
			250	OptiMat T250H TM-M 250A	356254
T400	250	OptiMat T400H TM-M 250A	356255		
	315	OptiMat T400H TM-M 315A	356256		
	400	OptiMat T400H TM-M 400A	356257		
T630	500	OptiMat T630H TM-M 500A	356258		
	630	OptiMat T630H TM-M 630A	356259		

T125H...T630H (Icu=100kA) M-M release (electromagnetic release for electric motor protection with short-circuit protection only)

Standard size	Icu version	Release	In, A	Type	Code	
					3 poles	
T125	H	M-M	1,5	OptiMat T125H M-M 1,5A	356260	
			2,5	OptiMat T125H M-M 2,5A	356261	
			6	OptiMat T125H M-M 6A	356262	
			10	OptiMat T125H M-M 10A	356263	
			16	OptiMat T125H M-M 16A	356264	
			20	OptiMat T125H M-M 20A	356265	
			25	OptiMat T125H M-M 25A	356266	
			32	OptiMat T125H M-M 32A	356267	
			40	OptiMat T125H M-M 40A	356268	
			50	OptiMat T125H M-M 50A	356269	
			63	OptiMat T125H M-M 63A	356270	
			80	OptiMat T125H M-M 80A	356271	
			100	OptiMat T125H M-M 100A	356272	
			125	OptiMat T125H M-M 125A	356273	
			T160	160	OptiMat T160H M-M 160A	356274
			T250	100	OptiMat T250H M-M 100A	356275
125				OptiMat T250H M-M 125A	356276	
160				OptiMat T250H M-M 160A	356277	
200				OptiMat T250H M-M 200A	356278	
250				OptiMat T250H M-M 250A	356279	
T400			250	OptiMat T400H M-M 250A	356280	
			315	OptiMat T400H M-M 315A	356281	
			400	OptiMat T400H M-M 400A	356282	
T630			500	OptiMat T630H M-M 500A	356283	
			630	OptiMat T630H M-M 630A	356284	

OptiMat T circuit breakers with leakage current protection unit for distribution network protection

T125H...T630H (Icu=100kA) -RCA (leakage current protection unit) ETA release (functional release with measurement and indication of currents)

Standard size	Icu version	Leakage protection unit	Release	In, A	Type	Code
						4 poles
T125	H	RCA	ETA	32	OptiMat T125H-RCA ETA 32A	357064
				63	OptiMat T125H-RCA ETA 63A	357065
				125	OptiMat T125H-RCA ETA 125A	357066
T250				250	OptiMat T250H-RCA ETA 250A	357067
T400				400	OptiMat T400H-RCA ETA 400A	357068
T630				630	OptiMat T630H-RCA ETA 630A	357069

T125H...T630H (Icu=100kA) -RCA (leakage current protection unit) ETA-COM release (functional release with measurement and indication of currents and data transmission)

Standard size	Icu version	Leakage protection unit	Release	In, A	Type	Code
						4 poles
T125	H	RCA	ETA-COM	32	OptiMat T125H-RCA ETA-COM 32A	357070
				63	OptiMat T125H-RCA ETA-COM 63A	357071
				125	OptiMat T125H-RCA ETA-COM 125A	357072
T250				250	OptiMat T250H-RCA ETA-COM 250A	357073
T400				400	OptiMat T400H-RCA ETA-COM 400A	357074
T630				630	OptiMat T630H-RCA ETA-COM 630A	357075

T250H...T630H (Icu=100kA) -RCA (leakage current protection unit) ETE release (advanced release with voltage, power, energy and harmonics measurement, data indication and transmission)

Standard size	Icu version	Leakage protection unit	Release	In, A	Type	Code
						4 poles
T250	H	RCA	ETE	100	OptiMat T250H-RCA ETE 100A 4P	357076
				250	OptiMat T250H-RCA ETE 250A 4P	357077
T400				400	OptiMat T400H-RCA ETE 400A 4P	357078
T630				630	OptiMat T630H-RCA ETE 630A 4P	357079

T125H...T630H (Icu=100kA) -RCA (leakage current protection unit) ETN release (basic release)

Standard size	Icu version	Leakage protection unit	Release	In, A	Type	Code
						4 poles
T125	H	RCA	ETN	32	OptiMat T125H-RCA ETN 32A	357058
				63	OptiMat T125H-RCA ETN 63A	357059
				125	OptiMat T125H-RCA ETN 125A	357060
T250				250	OptiMat T250H-RCA ETN 250A	357061
T400				400	OptiMat T400H-RCA ETN 400A	357062
T630				630	OptiMat T630H-RCA ETN 630A	357063

T125H...T630H (Icu=100kA) -RCA (leakage current protection unit) TM release (thermomagnetic release with overload and short circuit protection)

Standard size	Icu version	Leakage protection unit	Release	In, A	Type	Code						
						4 poles						
T125	H	RCA	TM	16	OptiMat T125H-RCA TM 16A	357041						
				20	OptiMat T125H-RCA TM 20A	357042						
				25	OptiMat T125H-RCA TM 25A	357043						
				32	OptiMat T125H-RCA TM 32A	357044						
				40	OptiMat T125H-RCA TM 40A	357045						
				50	OptiMat T125H-RCA TM 50A	357046						
				63	OptiMat T125H-RCA TM 63A	357047						
				80	OptiMat T125H-RCA TM 80A	357048						
				100	OptiMat T125H-RCA TM 100A	357049						
				125	OptiMat T125H-RCA TM 125A	357050						
				T250	H	RCA	TM	160	OptiMat T250H-RCA TM 160A	357051		
								200	OptiMat T250H-RCA TM 200A	357052		
250	OptiMat T250H-RCA TM 250A	357053										
T400	H	RCA	TM	315				OptiMat T400H-RCA TM 315A	357054			
				400				OptiMat T400H-RCA TM 400A	357055			
T630				H				RCA	TM	500	OptiMat T630H-RCA TM 500A	357056
										630	OptiMat T630H-RCA TM 630A	357057

OptiMat T Version S

OptiMat T circuit breakers for distribution network protection

T125S...T630S (Icu=150kA) ETA release (functional release with measurement and indication of currents)

Standard size	Icu version	Release	In, A	Type	Code	
					3 poles	4 poles
T125	S	ETA	32	OptiMat T125S ETA 32A	356526	356534
			63	OptiMat T125S ETA 63A	356527	356535
			125	OptiMat T125S ETA 125A	356528	356536
T160			160	OptiMat T160S ETA 160A	356529	356537
T250			250	OptiMat T250S ETA 250A	356530	356538
T400			250	OptiMat T400S ETA 250A	356531	356539
T630			400	OptiMat T400S ETA 400A	356532	356540
	630	OptiMat T630S ETA 630A	356533	356541		

T125S...T630S (Icu=150kA) ETA-COM release (functional release with measurement and indication of currents and data transmission)

Standard size	Icu version	Release	In, A	Type	Code	
					3 poles	4 poles
T125	S	ETA-COM	32	OptiMat T125S ETA-COM 32A	356542	356550
			63	OptiMat T125S ETA-COM 63A	356543	356551
			125	OptiMat T125S ETA-COM 125A	356544	356552
T160			160	OptiMat T160S ETA-COM 160A	356545	356553
T250			250	OptiMat T250S ETA-COM 250A	356546	356554
T400			250	OptiMat T400S ETA-COM 250A	356547	356555
			400	OptiMat T400S ETA-COM 400A	356548	356556
T630	630	OptiMat T630S ETA-COM 630A	356549	356557		

T250S...T630S (Icu=150kA) ETE release (advanced release with voltage, power, energy and harmonics measurement, data indication and transmission)

Standard size	Icu version	Release	In, A	Type	Code	
					3 poles	4 poles
T250	S	ETE	100	OptiMat T250S ETE 100A	356574	356579
			250	OptiMat T250S ETE 250A	356575	356580
T400			250	OptiMat T400S ETE 250A	356576	356581
T630			400	OptiMat T400S ETE 400A	356577	356582
			630	OptiMat T630S ETE 630A	356578	356583

T125S...T630S (Icu=150kA) ETN release (basic release)

Standard size	Icu version	Release	In, A	Type	Code	
					3 poles	4 poles
T125	S	ETN	32	OptiMat T125S ETN 32A	356502	356510
			63	OptiMat T125S ETN 63A	356503	356511
			125	OptiMat T125S ETN 125A	356504	356512
T160			160	OptiMat T160S ETN 160A	356505	356513
T250			250	OptiMat T250S ETN 250A	356506	356514
			250	OptiMat T400S ETN 250A	356507	356515
T400			400	OptiMat T400S ETN 400A	356508	356516
T630	630	OptiMat T630S ETN 630A	356509	356517		

T125S...T630S (Icu=150kA) TM release (thermomagnetic release with overload and short-circuit protection)

Standard size	Icu version	Release	In, A	Type	Code	
					3 poles	4 poles
T125	S	TM	16	OptiMat T125S TM 16A	356372	356393
			20	OptiMat T125S TM 20A	356373	356394
			25	OptiMat T125S TM 25A	356374	356395
			32	OptiMat T125S TM 32A	356375	356396
			40	OptiMat T125S TM 40A	356376	356397
			50	OptiMat T125S TM 50A	356377	356398
			63	OptiMat T125S TM 63A	356378	356399
			80	OptiMat T125S TM 80A	356379	356400
T160			100	OptiMat T125S TM 100A	356380	356401
			125	OptiMat T125S TM 125A	356381	356402
T250			160	OptiMat T160S TM 160A	356382	356403
			100	OptiMat T250S TM 100A	356383	356404
			125	OptiMat T250S TM 125A	356384	356405
			160	OptiMat T250S TM 160A	356385	356406
T400			200	OptiMat T250S TM 200A	356386	356407
			250	OptiMat T250S TM 250A	356387	356408
	250	OptiMat T400S TM 250A	356388	356409		
T630	315	OptiMat T400S TM 315A	356389	356410		
	400	OptiMat T400S TM 400A	356390	356411		
	500	OptiMat T630S TM 500A	356391	356412		
	630	OptiMat T630S TM 630A	356392	356413		

T125S...T630S (Icu=150kA) M release (electromagnetic release with short-circuit protection only)

Standard size	Icu version	Release	In, A	Type	Code	
					3 poles	4 poles
T125	S	M	16	OptiMat T125S M 16A	356414	356435
			20	OptiMat T125S M 20A	356415	356436
			25	OptiMat T125S M 25A	356416	356437
			32	OptiMat T125S M 32A	356417	356438
			40	OptiMat T125S M 40A	356418	356439
			50	OptiMat T125S M 50A	356419	356440
			63	OptiMat T125S M 63A	356420	356441
			80	OptiMat T125S M 80A	356421	356442
T160	S	M	100	OptiMat T125S M 100A	356422	356443
			125	OptiMat T125S M 125A	356423	356444
T250	S	M	160	OptiMat T160S M 160A	356424	356445
			100	OptiMat T250S M 100A	356425	356446
			125	OptiMat T250S M 125A	356426	356447
			160	OptiMat T250S M 160A	356427	356448
T400	S	M	200	OptiMat T250S M 200A	356428	356449
			250	OptiMat T250S M 250A	356429	356450
			250	OptiMat T400S M 250A	356430	356451
T630	S	M	315	OptiMat T400S M 315A	356431	356452
			400	OptiMat T400S M 400A	356432	356453
			500	OptiMat T630S M 500A	356433	356454
			630	OptiMat T630S M 630A	356434	356455

OptiMat T motor protection circuit breakers

T125S...T630S (Icu=150kA) ETA-M release (functional release for protecting electric motors with measurement and indication of currents)

Standard size	Icu version	Release	In, A	Type	Code
					3 poles
T125	S	ETA-M	32	OptiMat T125S ETA-M 32A	356558
			63	OptiMat T125S ETA-M 63A	356559
			125	OptiMat T125S ETA-M 125A	356560
T160	S	ETA-M	160	OptiMat T160S ETA-M 160A	356561
T250			250	OptiMat T250S ETA-M 250A	356562
T400			250	OptiMat T400S ETA-M 250A	356563
T630	S	ETA-M	400	OptiMat T400S ETA-M 400A	356564
			630	OptiMat T630S ETA-M 630A	356565

T125S...T630S (Icu=150kA) ETA-M-COM release (functional release for electric motor protection with measurement and indication of currents and data transmission)

Standard size	Icu version	Release	In, A	Type	Code
					3 poles
T125	S	ETA-M-COM	32	OptiMat T125S ETA-M-COM 32A	356566
			63	OptiMat T125S ETA-M-COM 63A	356567
			125	OptiMat T125S ETA-M-COM 125A	356568
T160	S	ETA-M-COM	160	OptiMat T160S ETA-M-COM 160A	356569
T250			250	OptiMat T250S ETA-M-COM 250A	356570
T400			250	OptiMat T400S ETA-M-COM 250A	356571
T630	S	ETA-M-COM	400	OptiMat T400S ETA-M-COM 400A	356572
			630	OptiMat T630S ETA-M-COM 630A	356573

T250S...T630S (Icu=150kA) ETE-M release (advanced release for electric motor protection with voltage, power, energy and harmonics measurement, data indication and transmission)

Standard size	Icu version	Release	In, A	Type	Code
					3 poles
T250	S	ETE-M	100	OptiMat T250S ETE-M 100A	356584
			250	OptiMat T250S ETE-M 250A	356585
T400	S	ETE-M	250	OptiMat T400S ETE-M 250A	356586
			400	OptiMat T400S ETE-M 400A	356587
T630	S	ETE-M	630	OptiMat T630S ETE-M 630A	356588

T125S...T630S (Icu=150kA) ETN-M release (basic release for motor protection)

Standard size	Icu version	Release	In, A	Type	Code
					3 poles
T125	S	ETN-M	32	OptiMat T125S ETN-M 32A	356518
			63	OptiMat T125S ETN-M 63A	356519
			125	OptiMat T125S ETN-M 125A	356520
T160	S	ETN-M	160	OptiMat T160S ETN-M 160A	356521
T250			250	OptiMat T250S ETN-M 250A	356522
T400			250	OptiMat T400S ETN-M 250A	356523
T630	S	ETN-M	400	OptiMat T400S ETN-M 400A	356524
			630	OptiMat T630S ETN-M 630A	356525

T125S...T630S (Icu=150kA) TM-M release (thermomagnetic release for electric motor protection with overload and short circuit protection)

Standard size	Icu version	Release	In, A	Type	Code
					3 poles
T125	S	TM-M	16	OptiMat T125S TM-M 16A	356456
			20	OptiMat T125S TM-M 20A	356457
			25	OptiMat T125S TM-M 25A	356458
			32	OptiMat T125S TM-M 32A	356459
			40	OptiMat T125S TM-M 40A	356460
			50	OptiMat T125S TM-M 50A	356461
			63	OptiMat T125S TM-M 63A	356462
			80	OptiMat T125S TM-M 80A	356463
100			OptiMat T125S TM-M 100A	356464	
125			OptiMat T125S TM-M 125A	356465	
T160			160	OptiMat T160S TM-M 160A	356466
T250			100	OptiMat T250S TM-M 100A	356467
			125	OptiMat T250S TM-M 125A	356468
			160	OptiMat T250S TM-M 160A	356469
			200	OptiMat T250S TM-M 200A	356470
			250	OptiMat T250S TM-M 250A	356471
T400	250	OptiMat T400S TM-M 250A	356472		
	315	OptiMat T400S TM-M 315A	356473		
	400	OptiMat T400S TM-M 400A	356474		
T630	500	OptiMat T630S TM-M 500A	356475		
	630	OptiMat T630S TM-M 630A	356476		

T125S...T630S (Icu=150kA) M-M release (electromagnetic release for electric motor protection with short-circuit protection only)

Standard size	Icu version	Release	In, A	Type	Code	
					3 poles	
T125	S	M-M	1,5	OptiMat T125S M-M 1,5A	356477	
			2,5	OptiMat T125S M-M 2,5A	356478	
			6	OptiMat T125S M-M 6A	356479	
			10	OptiMat T125S M-M 10A	356480	
			16	OptiMat T125S M-M 16A	356481	
			20	OptiMat T125S M-M 20A	356482	
			25	OptiMat T125S M-M 25A	356483	
			32	OptiMat T125S M-M 32A	356484	
			40	OptiMat T125S M-M 40A	356485	
			50	OptiMat T125S M-M 50A	356486	
			63	OptiMat T125S M-M 63A	356487	
			80	OptiMat T125S M-M 80A	356488	
			100	OptiMat T125S M-M 100A	356489	
			125	OptiMat T125S M-M 125A	356490	
			T160	160	OptiMat T160S M-M 160A	356491
			T250	100	OptiMat T250S M-M 100A	356492
125				OptiMat T250S M-M 125A	356493	
160				OptiMat T250S M-M 160A	356494	
200				OptiMat T250S M-M 200A	356495	
250				OptiMat T250S M-M 250A	356496	
T400			250	OptiMat T400S M-M 250A	356497	
			315	OptiMat T400S M-M 315A	356498	
			400	OptiMat T400S M-M 400A	356499	
T630			500	OptiMat T630S M-M 500A	356500	
			630	OptiMat T630S M-M 630A	356501	

OptiMat T circuit breakers with leakage current protection unit for distribution network protection

T125S...T630S (Icu=150kA) -RCA (leakage current protection unit) ETA release (functional release with measurement and indication of currents)

Standard size	Icu version	Leakage protection unit	Release	In, A	Type	Code
						4 poles
T125	S	RCA	ETA	32	OptiMat T125S-RCA ETA 32A	357103
				63	OptiMat T125S-RCA ETA 63A	357104
				125	OptiMat T125S-RCA ETA 125A	357105
T250				250	OptiMat T250S-RCA ETA 250A	357106
T400				400	OptiMat T400S-RCA ETA 400A	357107
T630				630	OptiMat T630S-RCA ETA 630A	357108

T125S...T630S (Icu=150kA) -RCA (leakage current protection unit) ETA-COM release (functional release with measurement and indication of currents and data transmission)

Standard size	Icu version	Leakage protection unit	Release	In, A	Type	Code
						4 poles
T125	S	RCA	ETA-COM	32	OptiMat T125S-RCA ETA-COM 32A	357109
				63	OptiMat T125S-RCA ETA-COM 63A	357110
				125	OptiMat T125S-RCA ETA-COM 125A	357111
T250				250	OptiMat T250S-RCA ETA-COM 250A	357112
T400				400	OptiMat T400S-RCA ETA-COM 400A	357113
T630				630	OptiMat T630S-RCA ETA-COM 630A	357114

T250S...T630S (Icu=150kA) -RCA (leakage current protection unit) ETE release (advanced release with voltage, power, energy and harmonics measurement, data indication and transmission)

Standard size	Icu version	Leakage protection unit	Release	In, A	Type	Code
						4 poles
T250	S	RCA	ETE	100	OptiMat T250S-RCA ETE 100A 4P	357115
				250	OptiMat T250S-RCA ETE 250A 4P	357116
T400				400	OptiMat T400S-RCA ETE 400A 4P	357117
T630				630	OptiMat T630S-RCA ETE 630A 4P	357118

T125S...T630S (Icu=150kA) -RCA (leakage current protection unit) ETN release (basic release)

Standard size	Icu version	Leakage protection unit	Release	In, A	Type	Code
						4 poles
T125	S	RCA	ETN	32	OptiMat T125S-RCA ETN 32A	357097
				63	OptiMat T125S-RCA ETN 63A	357098
				125	OptiMat T125S-RCA ETN 125A	357099
T250				250	OptiMat T250S-RCA ETN 250A	357100
T400				400	OptiMat T400S-RCA ETN 400A	357101
T630				630	OptiMat T630S-RCA ETN 630A	357102

T125S...T630S (Icu=150kA) -RCA (leakage current protection unit) TM release (thermomagnetic release with overload and short circuit protection)

Standard size	Icu version	Leakage protection unit	Release	In, A	Type	Code						
						4 poles						
T125	S	RCA	TM	16	OptiMat T125S-RCA TM 16A	357080						
				20	OptiMat T125S-RCA TM 20A	357081						
				25	OptiMat T125S-RCA TM 25A	357082						
				32	OptiMat T125S-RCA TM 32A	357083						
				40	OptiMat T125S-RCA TM 40A	357084						
				50	OptiMat T125S-RCA TM 50A	357085						
				63	OptiMat T125S-RCA TM 63A	357086						
				80	OptiMat T125S-RCA TM 80A	357087						
				100	OptiMat T125S-RCA TM 100A	357088						
				125	OptiMat T125S-RCA TM 125A	357089						
				T250	S	RCA	TM	160	OptiMat T250S-RCA TM 160A	357090		
								200	OptiMat T250S-RCA TM 200A	357091		
250	OptiMat T250S-RCA TM 250A	357092										
T400	S	RCA	TM	315				OptiMat T400S-RCA TM 315A	357093			
				400				OptiMat T400S-RCA TM 400A	357094			
T630				S				RCA	TM	500	OptiMat T630S-RCA TM 500A	357095
										630	OptiMat T630S-RCA TM 630A	357096

OptiMat T Version V

OptiMat T circuit breakers for distribution network protection

T250V...T630V (Icu=200kA) ETA release (functional release with measurement and indication of currents)

Standard size	Icu version	Release	In, A	Type	Code	
					3 poles	4 poles
T250	V	ETA	32	OptiMat T250V ETA 32A	356700	356707
			63	OptiMat T250V ETA 63A	356701	356708
			125	OptiMat T250V ETA 125A	356702	356709
			250	OptiMat T250V ETA 250A	356703	356710
T400			250	OptiMat T400V ETA 250A	356704	356711
			400	OptiMat T400V ETA 400A	356705	356712
T630			630	OptiMat T630V ETA 630A	356706	356713

T250V...T630V (Icu=200kA) ETA-COM release (functional release with measurement and indication of currents and data transmission)

Standard size	Icu version	Release	In, A	Type	Code	
					3 poles	4 poles
T250	V	ETA-COM	32	OptiMat T250V ETA-COM 32A	356714	356721
			63	OptiMat T250V ETA-COM 63A	356715	356722
			125	OptiMat T250V ETA-COM 125A	356716	356723
			250	OptiMat T250V ETA-COM 250A	356717	356724
T400			250	OptiMat T400V ETA-COM 250A	356718	356725
			400	OptiMat T400V ETA-COM 400A	356719	356726
T630			630	OptiMat T630V ETA-COM 630A	356720	356727

T250V...T630V (Icu=200kA) ETE release (advanced release with voltage, power, energy and harmonics measurement, data indication and transmission)

Standard size	Icu version	Release	In, A	Type	Code	
					3 poles	4 poles
T250	V	ETE	100	OptiMat T250V ETE 100A	356742	356747
			250	OptiMat T250V ETE 250A	356743	356748
T400			250	OptiMat T400V ETE 250A	356744	356749
			400	OptiMat T400V ETE 400A	356745	356750
T630			630	OptiMat T630V ETE 630A	356746	356751

T250V...T630V (Icu=200kA) ETN release (basic release)

Standard size	Icu version	Release	In, A	Type	Code	
					3 poles	4 poles
T250	V	ETN	32	OptiMat T250V ETN 32A	356679	356686
			63	OptiMat T250V ETN 63A	356680	356687
			125	OptiMat T250V ETN 125A	356681	356688
			250	OptiMat T250V ETN 250A	356682	356689
T400			250	OptiMat T400V ETN 250A	356683	356690
			400	OptiMat T400V ETN 400A	356684	356691
T630			630	OptiMat T630V ETN 630A	356685	356692

T250V...T630V (Icu=200kA) TM release (thermomagnetic release with overload and short-circuit protection)

Standard size	Icu version	Release	In, A	Type	Code	
					3 poles	4 poles
T250	V	TM	32	OptiMat T250V TM 32A	356589	356604
			40	OptiMat T250V TM 40A	356590	356605
			50	OptiMat T250V TM 50A	356591	356606
			63	OptiMat T250V TM 63A	356592	356607
			80	OptiMat T250V TM 80A	356593	356608
			100	OptiMat T250V TM 100A	356594	356609
			125	OptiMat T250V TM 125A	356595	356610
			180	OptiMat T250V TM 180A	356596	356611
			200	OptiMat T250V TM 200A	356597	356612
			250	OptiMat T250V TM 250A	356598	356613
T400			250	OptiMat T400V TM 250A	356599	356614
			315	OptiMat T400V TM 315A	356600	356615
			400	OptiMat T400V TM 400A	356601	356616
T630			500	OptiMat T630V TM 500A	356602	356617
			630	OptiMat T630V TM 630A	356603	356618

T250V...T630V (Icu=200kA) M release (electromagnetic release with short-circuit protection only)

Standard size	Icu version	Release	In, A	Type	Code	
					3 poles	4 poles
T250	V	M	32	OptiMat T250V M 32A	356619	356634
			40	OptiMat T250V M 40A	356620	356635
			50	OptiMat T250V M 50A	356621	356636
			63	OptiMat T250V M 63A	356622	356637
			80	OptiMat T250V M 80A	356623	356638
			100	OptiMat T250V M 100A	356624	356639
			125	OptiMat T250V M 125A	356625	356640
			160	OptiMat T250V M 160A	356626	356641
T400	V	M	200	OptiMat T250V M 200A	356627	356642
			250	OptiMat T250V M 250A	356628	356643
			250	OptiMat T400V M 250A	356629	356644
T630	V	M	315	OptiMat T400V M 315A	356630	356645
			400	OptiMat T400V M 400A	356631	356646
			500	OptiMat T630V M 500A	356632	356647
			630	OptiMat T630V M 630A	356633	356648

OptiMat T motor protection circuit breakers

T250V...T630V (Icu=200kA) ETA-M release (functional release for protection of electric motors with measurement and indication of currents)

Standard size	Icu version	Release	In, A	Type	Code
					3 poles
T250	V	ETA-M	32	OptiMat T250V ETA-M 32A	356728
			63	OptiMat T250V ETA-M 63A	356729
			125	OptiMat T250V ETA-M 125A	356730
			250	OptiMat T250V ETA-M 250A	356731
T400	V	ETA-M	250	OptiMat T400V ETA-M 250A	356732
T630	V	ETA-M	400	OptiMat T400V ETA-M 400A	356733
			630	OptiMat T630V ETA-M 630A	356734

T250V...T630V (Icu=200kA) ETA-M-COM release (functional release for protection of electric motors with measurement and indication of currents and data transmission)

Standard size	Icu version	Release	In, A	Type	Code
					3 poles
T250	V	ETA-M-COM	32	OptiMat T250V ETA-M-COM 32A	356735
			63	OptiMat T250V ETA-M-COM 63A	356736
			125	OptiMat T250V ETA-M-COM 125A	356737
			250	OptiMat T250V ETA-M-COM 250A	356738
T400	V	ETA-M-COM	250	OptiMat T400V ETA-M-COM 250A	356739
T630	V	ETA-M-COM	400	OptiMat T400V ETA-M-COM 400A	356740
			630	OptiMat T630V ETA-M-COM 630A	356741

T250V...T630V (Icu=200kA) ETE-M release (advanced release for protection of electric motors with voltage, power, energy and harmonics measurement, data indication and transmission)

Standard size	Icu version	Release	In, A	Type	Code
					3 poles
T250	V	ETE-M	100	OptiMat T250V ETE-M 100A	356752
			250	OptiMat T250V ETE-M 250A	356753
T400			250	OptiMat T400V ETE-M 250A	356754
			400	OptiMat T400V ETE-M 400A	356755
T630	V	ETE-M	630	OptiMat T630V ETE-M 630A	356756

T250V...T630V (Icu=200kA) ETN-M release (basic release for electric motor protection)

Standard size	Icu version	Release	In, A	Type	Code
					3 poles
T250	V	ETN-M	32	OptiMat T250V ETN-M 32A	356693
			63	OptiMat T250V ETN-M 63A	356694
			125	OptiMat T250V ETN-M 125A	356695
			250	OptiMat T250V ETN-M 250A	356696
T400			250	OptiMat T400V ETN-M 250A	356697
			400	OptiMat T400V ETN-M 400A	356698
T630	V	ETN-M	630	OptiMat T630V ETN-M 630A	356699

T250V...T630V (Icu=200kA) TM-M release (thermomagnetic release for electric motor protection with overload and short circuit protection)

Standard size	Icu version	Release	In, A	Type	Code
					3 poles
T250	V	TM-M	32	OptiMat T250V TM-M 32A	356649
			40	OptiMat T250V TM-M 40A	356650
			50	OptiMat T250V TM-M 50A	356651
			63	OptiMat T250V TM-M 63A	356652
			80	OptiMat T250V TM-M 80A	356653
			100	OptiMat T250V TM-M 100A	356654
			125	OptiMat T250V TM-M 125A	356655
			160	OptiMat T250V TM-M 160A	356656
			200	OptiMat T250V TM-M 200A	356657
			250	OptiMat T250V TM-M 250A	356658
T400	V	TM-M	250	OptiMat T400V TM-M 250A	356659
			315	OptiMat T400V TM-M 315A	356660
			400	OptiMat T400V TM-M 400A	356661
T630	V	TM-M	500	OptiMat T630V TM-M 500A	356662
			630	OptiMat T630V TM-M 630A	356663

T250V...T630V (Icu=200kA) M-M release (electromagnetic release for electric motor protection with short-circuit protection only)

Standard size	Icu version	Release	In, A	Type	Code
					3 poles
T250	V	M-M	32	OptiMat T250V M-M 32A	356664
			40	OptiMat T250V M-M 40A	356665
			50	OptiMat T250V M-M 50A	356666
			63	OptiMat T250V M-M 63A	356667
			80	OptiMat T250V M-M 80A	356668
			100	OptiMat T250V M-M 100A	356669
			125	OptiMat T250V M-M 125A	356670
			160	OptiMat T250V M-M 160A	356671
			200	OptiMat T250V M-M 200A	356672
			250	OptiMat T250V M-M 250A	356673
T400	V	M-M	250	OptiMat T400V M-M 250A	356674
			315	OptiMat T400V M-M 315A	356675
			400	OptiMat T400V M-M 400A	356676
T630	V	M-M	500	OptiMat T630V M-M 500A	356677
			630	OptiMat T630V M-M 630A	356678

OptiMat T Version R

OptiMat T circuit breakers for distribution network protection

T250R...T630R (Icu=80kA at 690VAC) ETA release (functional release with measurement and indication of currents)

Standard size	Icu version	Release	In, A	Type	Code	
					3 poles	4 poles
T250	R	ETA	32	OptiMat T250R ETA 32A	356868	356875
			63	OptiMat T250R ETA 63A	356869	356876
			125	OptiMat T250R ETA 125A	356870	356877
			250	OptiMat T250R ETA 250A	356871	356878
T400			250	OptiMat T400R ETA 250A	356872	356879
			400	OptiMat T400R ETA 400A	356873	356880
T630			630	OptiMat T630R ETA 630A	356874	356881

T250R...T630R (Icu=80kA at 690VAC) ETA-COM release (functional release with measurement and indication of currents and data transmission)

Standard size	Icu version	Release	In, A	Type	Code	
					3 poles	4 poles
T250	R	ETA-COM	32	OptiMat T250R ETA-COM 32A	356882	356889
			63	OptiMat T250R ETA-COM 63A	356883	356890
			125	OptiMat T250R ETA-COM 125A	356884	356891
			250	OptiMat T250R ETA-COM 250A	356885	356892
T400			250	OptiMat T400R ETA-COM 250A	356886	356893
			400	OptiMat T400R ETA-COM 400A	356887	356894
T630			630	OptiMat T630R ETA-COM 630A	356888	356895

T250R...T630R (Icu=80kA at 690VAC) ETE release (advanced release with voltage, power, energy and harmonics measurement, data indication and transmission)

Standard size	Icu version	Release	In, A	Type	Code	
					3 poles	4 poles
T250	R	ETE	100	OptiMat T250R ETE 100A	356910	356915
			250	OptiMat T250R ETE 250A	356911	356916
T400			250	OptiMat T400R ETE 250A	356912	356917
			400	OptiMat T400R ETE 400A	356913	356918
T630			630	OptiMat T630R ETE 630A	356914	356919

T250R...T630R (Icu=80kA at 690VAC) ETN release (basic release)

Standard size	Icu version	Release	In, A	Type	Code	
					3 poles	4 poles
T250	R	ETN	32	OptiMat T250R ETN 32A	356847	356854
			63	OptiMat T250R ETN 63A	356848	356855
			125	OptiMat T250R ETN 125A	356849	356856
			250	OptiMat T250R ETN 250A	356850	356857
T400			250	OptiMat T400R ETN 250A	356851	356858
			400	OptiMat T400R ETN 400A	356852	356859
T630			630	OptiMat T630R ETN 630A	356853	356860

T250R...T630R (Icu=80kA at 690VAC) TM release (thermomagnetic release with overload and short-circuit protection)

Standard size	Icu version	Release	In, A	Type	Code	
					3 poles	4 poles
T250	R	TM	32	OptiMat T250R TM 32A	356757	356772
			40	OptiMat T250R TM 40A	356758	356773
			50	OptiMat T250R TM 50A	356759	356774
			63	OptiMat T250R TM 63A	356760	356775
			80	OptiMat T250R TM 80A	356761	356776
			100	OptiMat T250R TM 100A	356762	356777
			125	OptiMat T250R TM 125A	356763	356778
			160	OptiMat T250R TM 160A	356764	356779
			200	OptiMat T250R TM 200A	356765	356780
			250	OptiMat T250R TM 250A	356766	356781
T400			250	OptiMat T400R TM 250A	356767	356782
			315	OptiMat T400R TM 315A	356768	356783
			400	OptiMat T400R TM 400A	356769	356784
T630			500	OptiMat T630R TM 500A	356770	356785
			630	OptiMat T630R TM 630A	356771	356786

T250R...T630R (Icu=80kA at 690VAC) M release (electromagnetic release with short-circuit protection only)

Standard size	Icu version	Release	In, A	Type	Code	
					3 poles	4 poles
T250	R	M	32	OptiMat T250R M 32A	356787	356802
			40	OptiMat T250R M 40A	356788	356803
			50	OptiMat T250R M 50A	356789	356804
			63	OptiMat T250R M 63A	356790	356805
			80	OptiMat T250R M 80A	356791	356806
			100	OptiMat T250R M 100A	356792	356807
			125	OptiMat T250R M 125A	356793	356808
			160	OptiMat T250R M 160A	356794	356809
			200	OptiMat T250R M 200A	356795	356810
T400	R	M	250	OptiMat T250R M 250A	356796	356811
			250	OptiMat T400R M 250A	356797	356812
			315	OptiMat T400R M 315A	356798	356813
T630	R	M	400	OptiMat T400R M 400A	356799	356814
			500	OptiMat T630R M 500A	356800	356815
			630	OptiMat T630R M 630A	356801	356816

OptiMat T motor protection circuit breakers

T250R...T630R (Icu=80kA at 690VAC) ETA-M release (functional release for protection of electric motors with measurement and indication of currents)

Standard size	Icu version	Release	In, A	Type	Code
					3 poles
T250	R	ETA-M	32	OptiMat T250R ETA-M 32A	356896
			63	OptiMat T250R ETA-M 63A	356897
			125	OptiMat T250R ETA-M 125A	356898
			250	OptiMat T250R ETA-M 250A	356899
T400	R	ETA-M	250	OptiMat T400R ETA-M 250A	356900
T630	R	ETA-M	400	OptiMat T400R ETA-M 400A	356901
			630	OptiMat T630R ETA-M 630A	356902

T250R...T630R (Icu=80kA at 690VAC) ETA-M-COM release (functional release for protection of electric motors with measurement and indication of currents and data transmission)

Standard size	Icu version	Release	In, A	Type	Code
					3 poles
T250	R	ETA-M-COM	32	OptiMat T250R ETA-M-COM 32A	356903
			63	OptiMat T250R ETA-M-COM 63A	356904
			125	OptiMat T250R ETA-M-COM 125A	356905
			250	OptiMat T250R ETA-M-COM 250A	356906
T400	R	ETA-M-COM	250	OptiMat T400R ETA-M-COM 250A	356907
T630	R	ETA-M-COM	400	OptiMat T400R ETA-M-COM 400A	356908
			630	OptiMat T630R ETA-M-COM 630A	356909

T250R...T630R (Icu=80kA at 690VAC) ETE-M release (advanced release for protection of electric motors with voltage, power, energy and harmonics measurement, data indication and transmission)

Standard size	Icu version	Release	In, A	Type	Code
					3 poles
T250	R	ETE-M	100	OptiMat T250R ETE-M 100A	356920
			250	OptiMat T250R ETE-M 250A	356921
T400			250	OptiMat T400R ETE-M 250A	356922
			400	OptiMat T400R ETE-M 400A	356923
T630	R	ETE-M	630	OptiMat T630R ETE-M 630A	356924

T250R...T630R (Icu=80kA at 690VAC) ETN-M release (basic release for motor protection)

Standard size	Icu version	Release	In, A	Type	Code
					3 poles
T250	R	ETN-M	32	OptiMat T250R ETN-M 32A	356861
			63	OptiMat T250R ETN-M 63A	356862
			125	OptiMat T250R ETN-M 125A	356863
			250	OptiMat T250R ETN-M 250A	356864
T400	R	ETN-M	250	OptiMat T400R ETN-M 250A	356865
			400	OptiMat T400R ETN-M 400A	356866
T630	R	ETN-M	630	OptiMat T630R ETN-M 630A	356867

T250R...T630R (Icu=80kA at 690VAC) TM-M release (thermomagnetic release for electric motor protection with overload and short circuit protection)

Standard size	Icu version	Release	In, A	Type	Code
					3 poles
T250	R	TM-M	32	OptiMat T250R TM-M 32A	356817
			40	OptiMat T250R TM-M 40A	356818
			50	OptiMat T250R TM-M 50A	356819
			63	OptiMat T250R TM-M 63A	356820
			80	OptiMat T250R TM-M 80A	356821
			100	OptiMat T250R TM-M 100A	356822
			125	OptiMat T250R TM-M 125A	356823
			160	OptiMat T250R TM-M 160A	356824
			200	OptiMat T250R TM-M 200A	356825
T400	R	TM-M	250	OptiMat T250R TM-M 250A	356826
			250	OptiMat T400R TM-M 250A	356827
			315	OptiMat T400R TM-M 315A	356828
T630	R	TM-M	400	OptiMat T400R TM-M 400A	356829
			500	OptiMat T630R TM-M 500A	356830
			630	OptiMat T630R TM-M 630A	356831

T250R...T630R (Icu=80kA at 690VAC) M-M release (electromagnetic release for electric motor protection with short-circuit protection only)

Standard size	Icu version	Release	In, A	Type	Code
					3 poles
T250	R	M-M	32	OptiMat T250R M-M 32A	356832
			40	OptiMat T250R M-M 40A	356833
			50	OptiMat T250R M-M 50A	356834
			63	OptiMat T250R M-M 63A	356835
			80	OptiMat T250R M-M 80A	356836
			100	OptiMat T250R M-M 100A	356837
			125	OptiMat T250R M-M 125A	356838
			160	OptiMat T250R M-M 160A	356839
			200	OptiMat T250R M-M 200A	356840
T400	R	M-M	250	OptiMat T250R M-M 250A	356841
			250	OptiMat T400R M-M 250A	356842
			315	OptiMat T400R M-M 315A	356843
T630	R	M-M	400	OptiMat T400R M-M 400A	356844
			500	OptiMat T630R M-M 500A	356845
			630	OptiMat T630R M-M 630A	356846

OptiMat T Versions HV and SD

OptiMat T circuit breakers for rated operating voltage up to 1000 VAC

T250M...T630M-HV (Icu=30kA at 800VAC/15kA at 1000VAC) TM release (thermomagnetic release with overload and short-circuit protection)

Standard size	Icu version	Release	In, A	Type	Code
					3 poles
T250	M-HV	TM	32	OptiMat T250M-HV TM 32A	356933
			40	OptiMat T250M-HV TM 40A	356934
			50	OptiMat T250M-HV TM 50A	356935
			63	OptiMat T250M-HV TM 63A	356936
			80	OptiMat T250M-HV TM 80A	356937
			100	OptiMat T250M-HV TM 100A	356938
			125	OptiMat T250M-HV TM 125A	356939
			160	OptiMat T250M-HV TM 160A	356940
			200	OptiMat T250M-HV TM 200A	356941
T400	M-HV	TM	250	OptiMat T250M-HV TM 250A	356942
			250	OptiMat T400M-HV TM 250A	356953
			315	OptiMat T400M-HV TM 315A	356954
T630	M-HV	TM	400	OptiMat T400M-HV TM 400A	356955
			500	OptiMat T630M-HV TM 500A	356959
			630	OptiMat T630M-HV TM 630A	356960

T250H...T630H-HV (Icu=50kA at 800VAC/15kA at 1000VAC) TM release (thermomagnetic release with overload and short-circuit protection)

Standard size	Icu version	Release	In, A	Type	Code
					3 poles
T250	H-HV	TM	32	OptiMat T250H-HV TM 32A	356943
			40	OptiMat T250H-HV TM 40A	356944
			50	OptiMat T250H-HV TM 50A	356945
			63	OptiMat T250H-HV TM 63A	356946
			80	OptiMat T250H-HV TM 80A	356947
			100	OptiMat T250H-HV TM 100A	356948
			125	OptiMat T250H-HV TM 125A	356949
			160	OptiMat T250H-HV TM 160A	356950
			200	OptiMat T250H-HV TM 200A	356951
T400	H-HV	TM	250	OptiMat T250H-HV TM 250A	356952
			250	OptiMat T400H-HV TM 250A	356956
			315	OptiMat T400H-HV TM 315A	356957
T630	H-HV	TM	400	OptiMat T400H-HV TM 400A	356958
			500	OptiMat T630H-HV TM 500A	356961
			630	OptiMat T630H-HV TM 630A	356962

OptiMat T switch-disconnectors

T125...T630-SD (switch-disconnector)

Standard size	Version (switch-disconnector)	In, A	Type	Code	
				3 poles	4 poles
T125	SD	125	OptiMat T125-SD	356925	356926
T250		250	OptiMat T250-SD	356927	356928
T400		400	OptiMat T400-SD	356929	356930
T630		630	OptiMat T630-SD	356931	356932

► Accessory items

OptiMat T electric accessories

Additional signaling contacts			
Contact function	Standard size	Name	Code
Status alarm contact AUX-CS	T125-T160	Status alarm contact AUX-L-2CS T125-T160	357152
		Status alarm contact AUX-L-3CS T125-T160	357154
		Status alarm contact AUX-R-1CS T125-T160	357150
	T250-T400-T630	Status alarm contact AUX-L-2CS T250-T400-T630	357153
		Status alarm contact AUX-L-3CS T250-T400-T630	357155
		Status alarm contact AUX-R-1CS T250-T400-T630	357151
Trigger contact AUX-TS	T125-T160	Trigger contact AUX-R-1TS T125-T160	357147
	T250-T400-T630	Trigger contact AUX-R-1TS T250-T400-T630	357148
Emergency alarm contact AUX-FTS	T125-T160-T250-T400-T630	Emergency alarm contact AUX-R-1FTS T125-T160-T250-T400-T630	357149

Additional control relays				
Relay type	Standard size	Name	Code	
Shunt trip SOR	T125-T160	Shunt trip SOR-L 110...127VAC T125-T160	357123	
		Shunt trip SOR-L 220...254VAC T125-T160	357124	
		Shunt trip SOR-L 380...440VAC T125-T160	357125	
		Shunt trip SOR-L 24VDC T125-T160	357126	
		Shunt trip SOR-L 110...127VDC T125-T160	357127	
		Shunt trip SOR-L 220...250VDC T125-T160	357128	
		Shunt trip SOR-R 110...127VAC T125-T160	357129	
		Shunt trip SOR-R 220...254VAC T125-T160	357130	
		Shunt trip SOR-R 380...440VAC T125-T160	357131	
		Shunt trip SOR-R 24VDC T125-T160	357132	
		Shunt trip SOR-R 110...127VDC T125-T160	357133	
		Shunt trip SOR-R 220...250VDC T125-T160	357134	
	T250-T400-T630	Shunt trip SOR-L 110...127VAC T250-T400-T630	357135	
		Shunt trip SOR-L 220...254VAC T250-T400-T630	357136	
		Shunt trip SOR-L 380...440VAC T250-T400-T630	357137	
		Shunt trip SOR-L 24VDC T250-T400-T630	357138	
		Shunt trip SOR-L 110...127VDC T250-T400-T630	357139	
		Shunt trip SOR-L 220...250VDC T250-T400-T630	357140	
		Shunt trip SOR-R 110...127VAC T250-T400-T630	357141	
		Shunt trip SOR-R 220...254VAC T250-T400-T630	357142	
		Shunt trip SOR-R 380...440VAC T250-T400-T630	357143	
		Shunt trip SOR-R 24VDC T250-T400-T630	357144	
		Shunt trip SOR-R 110...127VDC T250-T400-T630	357145	
		Shunt trip SOR-R 220...250VDC T250-T400-T630	357146	
	Undervoltage release UVR	T125-T160	Undervoltage release UVR-L 220...254VAC T125-T160	357119
			Undervoltage release UVR-L 380...440VAC T125-T160	357120
		T250-T400-T630	Undervoltage release UVR-L 220...254VAC T250-T400-T630	357121
			Undervoltage release UVR-L 380...440VAC T250-T400-T630	357122

Motor drive			
Drive type	Standard size	Name	Code
Motor drive ESMO	T125-T160	Motor drive ESMO 110VAC T125-T160	357166
		Motor drive ESMO 230VAC T125-T160	357167
		Motor drive ESMO 24VDC T125-T160	357168
		Motor drive ESMO 110VDC T125-T160	357169
		Motor drive ESMO 220VDC T125-T160	357170
		Motor drive ESMO 110VAC T250	357176
	T250	Motor drive ESMO 230VAC T250	357177
		Motor drive ESMO 24VDC T250	357178
		Motor drive ESMO 110VDC T250	357179
		Motor drive ESMO 220VDC T250	357180
		Motor drive ESMO 110VAC T400-T630	357181
		Motor drive ESMO 230VAC T400-T630	357182
	T400-T630	Motor drive ESMO 24VDC T400-T630	357183
		Motor drive ESMO 110VDC T400-T630	357184
		Motor drive ESMO 220VDC T400-T630	357185

OptiMat T electronic accessories

Electronic accessories (panel door display, testing unit, connector, additional electronic modules)			
Type	Standard size	Наименование	Code
Display ET HMI	T125..T630	Panel door display ET HMI T125-T160-T250-T400-T630 ETA-COM, ETE	357187
Test unit ET TEST	T125..T630	Test unit ET TEST T125-T160-T250-T400-T630	357186
Connector ESMO-COM	T125..T630	Data and control connector ESMO-COM	361177
Module CCM	T125..T630	Contact control module CCM T125-T160-T250-T400-T630 ETA-M, ETE-M	357157
Module MZSI	T400-T630	Zone selectivity module MZSI T400-T630 ETA, ETE	357158

Kits for OptiMat T versions

Plug-in and withdrawable kits				
Комплект	Standard size	Type	Code	
			3 poles	4 poles
Plug-in kit PMP/PFP	T125-T160	Plug-in kit PMP/PFP T125-T160	361162	361164
	T250	Plug-in kit PMP/PFP T250	361166	361168
	T400-T630	Plug-in kit PMP/PFP T400-T630	361172	361175
Drawout kit WMP/WFP	T400-T630	Drawout WMP/WFP with front terminals T400-T630	361184	361187
		Drawout WMP/WFP with rear terminals T400-T630	361188	361189

OptiMat T power terminal kits

Power terminals for connection				
Set	Standard size	Type	Code	
			3 poles (set - 6 pcs)	4 poles (set - 8 pcs)
Expanded terminals EST	T125-T160	Expanded terminals EST T125-T160	361120	361135
	T250	Expanded terminals EST T250	361136	361137
	T400-T630	Expanded terminals EST T400-T630	361138	361139
Rear terminals ERT	T125-T160	Rear terminals ERT T125-T160	361152	361153
	T250	Rear terminals ERT T250	361154	361155
	T400-T630	Rear terminals ERT T400-T630	361156	361157
Extended terminals EET	T125-T160	Extended terminals EET T125-T160	361140	361145
	T250	Extended terminals EET T250	361148	361149
	T400-T630	Extended terminals EET T400-T630	361150	361151

OptiMat T mechanical accessories

Door rotary handles				
Type	Standard size	Name	Code	
Rotary handle RH-E and rod RH-E-S	T125-T160	External rotary handle RH-E T125-T160	357188	
		Rotary handle rod 500 mm RH-E-S T125-T160-T250	361180	
	T250	External rotary handle RH-E T250	357189	
		Rotary handle rod 500 mm RH-E-S T125-T160-T250	361180	
	T400-T630	External rotary handle RH-E T400-T630	357190	
		Rotary handle rod 500 mm RH-E-S T400-T630	361181	

Power terminal covers

Set	Standard size	Type	Code	
			3 poles	4 poles
Terminal covers L-TC	T125-T160	Power terminal low covers L-TC T125-T160 2 pcs	357229	357230
	T250	Power terminal low covers L-TC T250 2 pcs	357231	357232
	T400-T630	Power terminal low covers L-TC T400-T630 2 pcs	357233	357234

Mechanical locks

Set	Standard size	Type	Code	
			3 poles	4 poles
Locking in deactivated state PLL	T125-T160-T250	Handle locking in «off» state PLL T125-T160-T250	357159	357159
	T400-T630	Handle locking in «off» state PLL T400-T630	361179	361179
	T125-T160	Mutual mechanical lever locking PLIL T125-T160	357160	357163
Mutual mechanical locking PLIL	T250	Mutual mechanical lever locking PLIL T250	357161	357164
	T400-T630	Mutual mechanical lever locking PLIL T400-T630	357162	357165