

## Motor protective circuit breakers MPE 25

Rated current  
0,16 - 32 A

### Example of MPE configuration:



#### Advantages

- With overload and short circuit protection
- Fixed short circuit release  $13 \times I_u$
- With phase-failure sensitivity according to IEC/EN 60947-4-1
- With temperature compensation
- Can be used as main switch
- MPE25 up to 10A at 400/415V are self-protected
- MPE25 above 10A provide a breaking capacity of 50kA at 400/415V according to IEC/EN 60947-2

**IE3 CONFORM**



#### Motor protective circuit breaker MPE25

Type	Code No.	Operational inst. current $I_u$ (A)	Setting overl. release $I_r$ (A)	Short-circuit release $I_{rm}$ (A)	Weight [g]	Packaging [pcs]
MPE25-0,16	004648001	0.16	0,1-0,16	1.9	322	1
MPE25-0,25	004648002	0.25	0,16-0,25	3	322	1
MPE25-0,40	004648003	0.4	0,25-0,4	4,8	322	1
MPE25-0,63	004648004	0.63	0,4-0,63	7,5	322	1
MPE25-1,0	004648005	1	0,63-1,0	12	322	1
MPE25-1,6	004648006	1.6	1,0-1,6	19	322	1
MPE25-2,5	004648007	2.5	1,6-2,5	30	322	1
MPE25-4,0	004648008	4	2,5-4,0	48	322	1
MPE25-6,3	004648009	6.3	4,0-6,3	75	322	1
MPE25-10	004648010	10	6,3-10	120	322	1
MPE25-16	004648011	16	10-16	190	322	1
MPE25-20	004648012	20	16-20	240	322	1
MPE25-25	004648013	25	20-25	300	322	1
MPE25-32	004648014	32	25-32	384	322	1



#### Front mountable auxiliary contact block, the 45mm widths - MPE remain unchanged

Type	Code No.	Wiring diagram	Auxiliary contacts NO, NC	Weight [g]	Packaging [pcs]
ACBFE-11	004648021		1, 1	20	1

## Motor protective circuit breaker MPE25

General technical data				
Standards		IEC/EN 60 947		
Climatic proffing		damp heat, constant to IEC 60 068-2-3 damp heat, cyclical to IEC 60 068-2-30		
Ambient temperature	Storage	°C	-50 ... +80	
	Open	°C	-20 ... +70	
	Enclosed	°C	-20 ... +35	
Mounting position		any position		
Degree of protection		IP20		
Protection against direct contact		IP20		
Shock resistance to IEC 60 068-2-27		g	15	
Altitude		m	2000	
Conductor cross-section for main circuit	solid	mm <sup>2</sup>	1 x (1,5 ... 6) / 2 x (1,5 ... 6)	
	stranded	mm <sup>2</sup>	2 x (1,5 ... 6) / 2 x (1,5 ... 6)	
Tightening torque	main circuits	Nm	2,0 ... 2,5	
	control circuits	Nm	1,0 ... 1,25	
Main contacts				
Rated impulse withstand voltage U <sub>imp</sub>		kV	6	
Overvoltage categ./pollution degree		III/3		
Rated operational voltage U <sub>e</sub>		V	690	
Rated operational current I <sub>e</sub>		25 or setting current of overload release		
Rated frequency		Hz	50/60	
Current heat losses, 3-pole at oper. T	W		5 (MPE25-0,1 - MPE25-0,63)	
	W		6 (MPE25-1 - MPE25-6,3)	
	W		7 (MPE25-10)	
	W		8 (MPE25-16 - MPE25-25)	
	W		10 (MPE25-32)	
Life span, mechanical = electrical		Ops.	100.000	
Maximum operating frequency		Ops./h	15	
Releases				
Temperature compensation		°C	-20 ... +60	
Adjustable overload releases		x I <sub>u</sub>	0,6 - 1	
Fixed short circuit releases		x I <sub>u</sub>	12	
Phase failure sensitivity		IEC/EN 60 947-4-1		
Auxiliary contacts				
Rated impulse withstand voltage		kV	6	
Overvoltage category/pollution degree		III/3		
Rated operational voltage		V	690 (250 -> ACBFE...)	
Rated operational current				
AC-15	24V	I <sub>e</sub>	A	6 (2 -> ACBFE)
	230V	I <sub>e</sub>	A	4 (0,5 -> ACBFE)
	380V-415V	I <sub>e</sub>	A	3 (0 -> ACBFE)
	440V-500V	I <sub>e</sub>	A	2 (0 -> ACBFE)
DC-13	24V	I <sub>e</sub>	A	2 (1 -> ACBFE)
	60V	I <sub>e</sub>	A	0.5 (0,15 -> ACBFE)
	110V	I <sub>e</sub>	A	0.5 (0 -> ACBFE)
	220V	I <sub>e</sub>	A	0.25 (0 -> ACBFE)
Control circuit reliability at U <sub>e</sub>		U <sub>min</sub> = 17V, I <sub>min</sub> = 5mA		
Fault probability		< 1 fault in 1 million operations		
Short-circuit rating without welding		Fuse gG	A	10
Conductors cross-section for auxiliary and control circuits		solid or stranded	mm <sup>2</sup>	1 x (0,5 ... 2,5) / 2 x (0,5 ... 2,5)