

# MOTOR PROTECTION CIRCUIT BREAKERS - MS32



MOTOR PROTECTION CIRCUIT BREAKERS ARE SPECIAL TYPE OF CIRCUIT BREAKERS DESIGNED FOR PROTECTION OF WIDE RANGE OF SINGLE-PHASE AND THREE-PHASE AC MOTORS AGAINST OVERLOAD AND SHORT CIRCUIT. THEY ARE USED IN INDUSTRY, SMALL MACHINES, AGRICULTURAL MACHINES, COMPRESSORS ETC.



## FOR MOTOR PROTECTION:

- All kind of AC induction motors
- For three-phase motors up to 22 kW
- Various low-inductive loads

## OTHER BENEFITS:

- Manual control:
  - START, STOP, push-buttons - with a trip indication (i.e. push-buttons stay in the middle position)
- Automatic switch-off at over-current with thermal or magnetic release
- Control with under-voltage release or shunt release
- An auxiliary switch for side mounting or flush mounting used for indication of the switching state
- Indication of release with trip indicating auxiliary switch
- ON/OFF buttons positions unequivocally indicates switching position of main contacts
- Contact material :
  - resistant to contact welding
  - enables low contact heating
- Isolating distance between contacts: 4.5 mm per contact place
- Connection of a rigid or flexible conductor
- Assembly to 35 mm wide mounting rail in compliance with EN 60715
- Vertical or horizontal operational position

# MOTOR PROTECTION CIRCUIT BREAKERS - MS32

Motor protection circuit-breakers areas of use

Type	Motor protection	Overload protection	Short-circuit protection	Single-phase consumers	Transformer protection
MS32	■	■	■	■	

## MOTOR PROTECTION CIRCUIT BREAKERS MS32

With overload and short-circuit release

AC-3 acc. to IEC/EN 60947-4-1

Type	Setting range (A)	Motor power (3-phase, 400 V) (kW)	Ordering No.	Weight (g)	Packaging (pcs)
MS32-0.16	0.1 ... 0.16		30.108.757	279	1
MS32-0.25	0.16 ... 0.25	0.06	30.108.758	279	1
MS32-0.4	0.25 ... 0.4	0.09	30.108.759	279	1
MS32-0.63	0.4 ... 0.63	0.12 ... 0.18	30.108.760	279	1
MS32-1	0.63 ... 1	0.18 ... 0.25	30.108.761	279	1
MS32-1.6	1 ... 1.6	0.37 ... 0.55	30.108.762	279	1
MS32-2.5	1.6 ... 2.5	0.75	30.108.763	279	1
MS32-4	2.5 ... 4	1.1 ... 1.5	30.108.764	279	1
MS32-6.3	4 ... 6.3	2.2	30.108.765	279	1
MS32-10	6.3 ... 10	3 ... 4	30.108.766	279	1
MS32-14	9 ... 14	5.5	30.108.767	279	1
MS32-18	13 ... 18	7.5	30.108.768	279	1
MS32-23	17 ... 23	9 ... 11	30.108.769	279	1
MS32-27	23 ... 27	11	30.108.770	279	1
MS32-32	25 ... 32	15	30.108.771	279	1



## ORDERING DATA

**MS32 - 4**

Setting range (A)

Type

# MOTOR PROTECTION CIRCUIT BREAKERS - ACCESSORIES

## MS32

### Auxiliary contact block HSV

Type	Number of contacts		Wiring diagram	Ordering No.	Weight (g)	Packaging (pcs)
	NO	NC				
HSV10	1	0		38.902.521	32	1
HSV01	0	1		38.902.520	32	1



- HSV contact changes position from its normal state when the MS32 MPCB is switched on.

### Trip-indicating contact block HRS

AC-15, DC-13 acc. to IEC/EN 60947-5-1

Type	Number of contacts		Wiring diagram	Ordering No.	Weight (g)	Packaging (pcs)
	NO	NC				
HRS10	1	0		38.902.523	32	1
HRS01	0	1		38.902.522	32	1



- HRS contact changes position from its normal state when the MS32/MS18 MPCB trips due to overload, short-circuit or manual depression of the TEST lever.

### Auxiliary contact block for lateral mounting HS

AC-15, DC-13 acc. to IEC/EN 60947-5-1

Type	Number of contacts		Wiring diagram	Ordering No.	Weight (g)	Packaging (pcs)
	NO	NC				
HS10	1	0		38.902.456	32	1
HS11	1	1		38.902.458	32	1
HS20	2	0		38.902.460	32	1



### Adapters for connection of MS32 with a contactor

Type	Used for	Ordering No.	Weight (g)	Packaging (pcs)
MSK07	K07	30.018.211	10	10
MSKNL9	KNL9 ... KNL18	30.018.212	10	10
MSKNL22	KNL22 ... KNL30	30.018.213	10	10

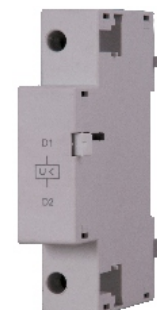


# MOTOR PROTECTION CIRCUIT BREAKERS - ACCESSORIES

## MS32

### Under-voltage release UR

Voltage (V)*	Frequency (Hz)	Ordering No.	Weight (g)	Packaging (pcs)
24	50	38.902.534	62	1
24	60	38.902.535	62	1
110	50	38.902.941	62	1
110	60	38.902.536	62	1
230	50	38.902.461	62	1
230	60	38.902.943	62	1
240	50	38.902.524	62	1
240	60	38.902.537	62	1
400	50	38.902.634	62	1
400	60	38.902.947	62	1
415	50	38.902.533	62	1
415	60	38.902.949	62	1
480	50	38.902.951	62	1
480	60	38.902.538	62	1
500	50	38.902.952	62	1
500	60	38.902.939	62	1
600	50	38.902.954	62	1
600	60	38.902.539	62	1



### Shunt release AR

Voltage (V)*	Frequency (Hz)	Ordering No.	Weight (g)	Packaging (pcs)
24	50	38.902.574	62	1
24	60	38.902.575	62	1
110	50	38.902.940	62	1
110	60	38.902.576	62	1
230	50	38.902.462	62	1
230	60	38.902.942	62	1
240	50	38.902.525	62	1
240	60	38.902.944	62	1
400	50	38.902.945	62	1
400	60	38.902.946	62	1
415	50	38.902.573	62	1
415	60	38.902.948	62	1
480	50	38.902.950	62	1
480	60	38.902.578	62	1
500	50	38.902.579	62	1
500	60	38.902.938	62	1
600	50	38.902.953	62	1
600	60	38.902.955	62	1



### Enclosures for MS32

Type	Degree of protection	Ordering No.	Weight (g)	Packaging (pcs)
Enclosure HO-41	IP41	38.423.019	222	1
Enclosure HO-55	IP55	38.423.020	222	1
Frame FP-41	IP41	38.423.111	158	1
Frame FP-55	IP55	38.423.112	158	1
Front plate P-41	IP41	37.425.102	200	1
Front plate P-55	IP55	38.423.137	200	1



P-41/55



FP-41/55



HO-41/55

# MOTOR PROTECTION CIRCUIT BREAKERS - ACCESSORIES

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Accessories for enclosures HO-41/55, FP-41/55, P-41/55

Type	Voltage	Ordering No.	Weight (g)	Packaging (pcs)
Emergency stop push-button <b>E</b>	/	38.902.528	40	1
Emergency stop push-button with keylock <b>E-K</b>	/	38.902.530	40	1
Padlocking feature <b>HZ</b>	/	38.423.095	95	1
Push-button diaphragm <b>IP55</b>	/	38.423.113	12	1
Neutral link <b>NL</b>	/	38.552.076	525	25
Signal lamp <b>SSr</b> (Red)	250 V	623.000.131	175	25
	400 V	623.009.261		
Signal lamp <b>SSz</b> (Green)	250 V	623.009.257	175	25
	400 V	623.009.262		
Signal lamp <b>SSb</b> (Transparent)	250 V	623.009.256	175	25
	400 V	623.009.263		
Cable inlet M25 x 1.5	/	315.609.520	15	100



# MOTOR PROTECTION CIRCUIT BREAKERS - ACCESSORIES

## MS32

### Connection blocks

MSK07, MSKNL9 and MSKNL22 adapters are used for connecting a motor protection switch with a contactor forming a single-unit starter for quick assembly to a 35 mm wide mounting rail (EN 60715).

- **MSK07** - Adapter for connecting MS32 motor protection switch with K07 mini contactor
- **MSKNL9** - Adapter for connecting MS32 motor protection switch with KNL9-KNL18 contactor
- **MSKNL22** - Adapter for connecting MS32 motor protection switch with KNL22, KNL30 contactor

