

J7MN motor protection circuit breakers from 0.10 A to 100 A

J7MN starters protect motors against thermal overload and short circuit.
The J7MN can be equipped with additional auxiliary contacts, tripping indicator (alarm), undervoltage release and/or shunt release. All models can be locked for safe maintenance.

- Rated operational currents of 32 A for the rocker type
- Rated operational currents of 32 A, 63 A and 100 A for the rotary types
- Switching capacity is 100 kA/415 V up-to 13 A and 50 kA/415 V up-to 100 A
- Electrical/mechanical link modules available up-to 11 kW motor protection units
- All components are finger proof

Ordering information

Rated current in A	Suitable for motors 3 ~ 400 V kW	Current setting range		Short-circuit breaking capacity at 3 ~ 400 V kA	Size in mm (HxWxD)	Order code
		Thermal overload release A	Instantaneous short-circuit release A			
0,16	–	0.10 - 0.16	2,1	100	98x45x75	J7MN-3P-E16
0,25	0,06	0.16 - 0.25	3,3	100		J7MN-3P-E25
0,4	0,09	0.25 - 0.4	5,2	100		J7MN-3P-E4
0,63	0,18	0.4 - 0.63	8,2	100		J7MN-3P-E63
1	0,25	0.63 - 1	13	100		J7MN-3P-1
1,6	0,55	1 - 1.6	20,8	100		J7MN-3P-1E6
2,5	0,75	1.6 - 2.5	32,5	100		J7MN-3P-2E5
4	1,5	2.5 - 4	52	100		J7MN-3P-4
6	2,2	4 - 6	78	100		J7MN-3P-6
8	3	5 - 8	104	100		J7MN-3P-8
10	4	6 - 10	130	50		J7MN-3P-10
13	5,5	9 - 13	169	50		J7MN-3P-13
17	7,5	11 - 17	221	20		J7MN-3P-17
22	7,5	14 - 22	286	15		J7MN-3P-22
26	11	18 - 26	338	15		J7MN-3P-26
32	15	22 - 32	416	15		J7MN-3P-32
0,16	–	0.10 - 0.16	2,1	100	98x45x100	J7MN-3R-E16
0,25	0,06	0.16 - 0.25	3,3	100		J7MN-3R-E25
0,4	0,09	0.25 - 0.4	5,2	100		J7MN-3R-E4
0,63	0,18	0.4 - 0.63	8,2	100		J7MN-3R-E63
1	0,25	0.63 - 1	13	100		J7MN-3R-1
1,6	0,55	1 - 1.6	20,8	100		J7MN-3R-1E6
2,5	0,75	1.6 - 2.5	32,5	100		J7MN-3R-2E5
4	1,5	2.5 - 4	52	100		J7MN-3R-4
6	2,2	4 - 6	78	100		J7MN-3R-6
8	3	5 - 8	104	100		J7MN-3R-8
10	4	6 - 10	130	100		J7MN-3R-10
13	5,5	9 - 13	169	100		J7MN-3R-13
17	7,5	11 - 17	221	50		J7MN-3R-17
22	7,5	14 - 22	286	50		J7MN-3R-22
26	11	18 - 26	338	50		J7MN-3R-26
32	15	22 - 32	416	50		J7MN-3R-32
26	12,5	18 - 26	338	50	140x55x144	J7MN-6R-26
32	15	22 - 32	416	50		J7MN-6R-32
40	18,5	28 - 40	520	50		J7MN-6R-40
50	22	34 - 50	650	50		J7MN-6R-50
63	30	45 - 63	819	50		J7MN-6R-63
63	30	45 - 63	819	50	165x70x171	J7MN-9R-63
75	37	55 - 75	975	50		J7MN-9R-75
90	45	70 - 90	1170	50		J7MN-9R-90
100	–	80 - 100	1300	50		J7MN-9R-100

Accessories

Description	Version		For circuit breaker	Order code
Transverse auxiliary contact block				
Contact block	1 NO + 1 NC		All	J7MN-11F
	2NO			J7MN-20F
	2NC			J7MN-02F
Auxiliary contact block for left hand side mounting (max. 2 pc. per circuit breaker)				
Contact block (9 mm)	1 NO + 1 NC		All	J7MN-11S
	2NO			J7MN-20S
	2NC			J7MN-02S
Signalling switch for left hand side mounting (max. 1 pc. per circuit breaker)				
Signalling switch (18 mm)	1 NO + 1 NC any tripping condition		–	J7MN-TA-11S
	1 NO + 1 NC short circuit tripping condition		–	J7MN-T-11S
Undervoltage releases for right hand side mounting (max 1 pc. per circuit breaker)				
Trips the circuit breaker when the voltage is interrupted. Prevents the motor from being restarted accidentally when the voltage is restored, suitable for EMERGENCY STOP according to VDE 0113	AC 50 Hz	AC 60 Hz	All	–
	24 V	28 V		J7MN-U-24
	110-127 V	120 V		J7MN-U-110
	220-230 V	240-260 V		J7MN-U-230
	240 V	277 V		J7MN-U-240
	380-400 V	440-460 V		J7MN-U-400
	415-440 V	460-480 V		J7MN-U-415
Shunt releases for right hand side mounting (max 1 pc. per circuit breaker)				
Trips the circuit breaker when the release coil is energized	AC 50 Hz	AC 60 Hz	All	–
	24 V	28 V		J7MN-S-24
	110-127 V	120 V		J7MN-S-110
	220-230 V	240-260 V		J7MN-S-230
	240 V	277 V		J7MN-S-240
	380-400 V	440-460 V		J7MN-S-400
	415-440 V	460-480 V		J7MN-S-415
Terminal block				
Terminal block	Up to 600 V according to UL 489 not for transverse auxiliary contact block		J7MN-3R	J7MN-TB32
			J7MN-9R	J7MN-TB100

Specifications

Type		J7MN-3P	J7MN-3R	J7MN-6R	J7MN-9R
Number of poles		3	3	3	3
Max. rated current Inmax (= max. rated operational current I_e)	**A**	32	32	63	100
Permissible ambient temperature	**Storage/transport**	-50 to 80°C			
	Operation	-20 to 60°C			
Rated operational voltage U_e	**V**	690			
Rated frequency	**Hz**	50/60			
Rated insulation voltage U_i	**V**	690			
Rated impulse withstand voltage U_{imp}	**kV**	6			
Utilization category	**IEC 60 947-2 (circuit breaker)**	A			
	IEC 60 947-4-1 (motor starter)	AC-3			
Class	**According to IEC 60 947-4-1**	10			
Degree of protection	**According to IEC 60 529**	IP20	IP20	IP20	IP20
Phase failure sensitivity	**According to IEC 60 947-4-1**	Yes			
Explosion protection	**According to EC Directive 94191EC**	Yes			
Isolator characteristics	**According to IEC 60 947-3**	Yes			
Main and EM. STOP switch characteristics	**According to IEC 60 204-1 (VDE113)**	Yes			
Safe isolation between main and auxiliary circuits According to DIN VDE 0106 Part 101	**Up to 400 V + 10%**	Yes			
	Up to 415 V + 5%	Yes			
Mechanical endurance	**Operating cycles**	100,000	100,000	50,000	50,000
Electrical endurance		100,000	100,000	25,000	25,000
Max. operating frequency per hour (motor starts)	**1/h**	25	25	25	25