

Contactors

Thermal overload relays

BR16, BR30



- A three-pole overload relays for use with KNL6 to KNL30 and KNL6G to KNL30G contactors
- Used for overload protection of motors with operational currents up to 16 A (BR16) or 30 A (BR30) and operational voltages up to 690 V AC.
- Adjustable current setting
- Ambient temperature compensated
- Electrically isolated auxiliary contacts (1xNO and 1xNC)
- A RESET button provides both manual and automatic reset options
- A double trip lever provides sensitivity to phase loss in accordance with IEC/EN 60947-4-1.
- Degree of protection IP20

Setting ranges and maximum permitted back-up fuses

Type	Setting range (A)	Max. back-up fuse gL/gG (A)
BR16	0.1 - 0.16	1
	0.16 - 0.25	1
	0.25 - 0.4	1
	0.35 - 0.5	1
	0.45 - 0.63	1
	0.55 - 0.8	3
	0.75 - 1	3
	0.9 - 1.3	3
	1.1 - 1.6	3
	1.4 - 2	6
	1.8 - 2.5	6
	2.3 - 3.2	6
	2.9 - 4	10
	3.5 - 4.8	10
	4.5 - 6.3	15
	5.5 - 7.5	15
	7.2 - 10	25
	9 - 12.5	30
BR30	11.3 - 16	40
	15 - 20	50
	17.5 - 21.5	50
	21 - 25	60
	24.5 - 30	70

Contactors

Thermal overload relays

BR16, BR30

TECHNICAL DATA				CONTACTOR RELAYS	
GENERAL	Type			BR16	BR30
	Standards			IEC / EN 60947-4-1, IEC / EN 60947-5-1, UL 508	
	Approvals			UL	
	For use with			KNL6-18, KNL6G-18G	KNL22, KNL30
	Ambient temperature	open closed	°C	-5 ... +55 -5 ... +55	
	Terminal capacity		mm ²	1...10 (main) 0.75...2.5 (auxiliary)	
	Screw	main terminals auxiliary terminals		M 4 M3.5	
	Screw head			PZ2	
	Tightening torque	main terminals auxiliary terminals	Nm	1.2 0.8	
	Dimensions (W×H×D)		mm	45×70.5×60	45×69×60
	Weight		kg	0.115	
MAIN CIRCUIT	Rated insulation voltage	U_i	V	690	
	Rated impulse withstand voltage	U_{imp}	kV	6	
	Rated operational voltage	U_e	V	690	
	Adjustable current	I_r	A	0.1...20	17.5...30
	Rated frequency	f	Hz	50 / 60	
	Overvoltage category and pollution degree acc. to IEC/EN 60947-1			III / 3	
	Trip class acc. to IEC/EN 60947-4-1			10	
	Power loss	P	W	5...6.5 (depending on setting range)	
AUXILIARY CIRCUITS	Rated insulation voltage	U_i	V	690	
	Rated impulse withstand voltage	U_{imp}	kV	6	
	Rated operational voltage	U_e	V	up to 500 (AC) up to 230 (DC)	
	Overvoltage category and pollution degree acc. to IEC/EN 60947-1			III / 3	
	Thermal current (both contacts)	I_{th}	A	6	
	Rated operational currents (both contacts)				
	AC-15 230 V 400 V 500 V	I_e	A	3 2 1	
	Rated operational currents (both contacts) DC-13 60 V 110 V 230 V	I_e	A	0.45 0.25 0.10	

CONNECTION DIAGRAM

DIMENSIONS

