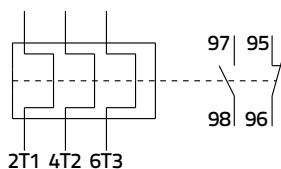


Thermal overload relay BR16 and BR30

TECHNICAL DATA

Type	Symbol	Unit	BR16	BR30
Standards			IEC 60947-4-1, IEC 60947-5-1, UL508	
Approvals			CE, UL	
For use with			KNL9(G) ... KNL18(G)	KNL22(G) ... KNL38(G)
Degree of protection			IP20	
Ambient temperature operating		°C	-5 ... +55	
storage			-25 ... +70	
Dimensions (WxHxD)		mm	45 x 70.5 x 60	45 x 69 x 60
Operating position			vertical	
Reset type			auto, manual	
Maximum altitude above sea level		m	2000	
Weight		g	115	
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 / pollution degree acc. to IEC/EN 60947-1			III / 3	
Trip class acc. to IEC/EN 60947-4-1			10	
Temperature compensation range		°C	-5 ... +40	
Sensitivity to phase failure			yes	
Power loss at I_n	P	W	5 ... 6.5	
Terminal capacity		mm ²	1 ... 10	
Conductor insulation stripping length		mm	10	
Screw			M4	
Screw head			PZ2	
Tightening torque		Nm	1.2	
Rated insulation voltage	U_i	V	690	
Rated impulse withstand voltage	U_{imp}	kV	6	
Rated operational voltage	U_e	V	AC: 500 ; DC: 230	
Overvoltage category / pollution degree acc. to IEC/EN 60947-1			III / 3	
Thermal current (both contacts)	I_{th}	A	6	
Contact electrical rating			A600 / Q300	
Rated operational current AC-15				
230 V	NO	I_e	A	3
400 V				2
500 V				1
230 V	NC			3
400 V				2
500 V				1
Rated operational current DC-13				
60 V	both contacts	I_e	A	0.45
110 V				0.25
230 V				0.1
Terminal capacity		mm ²	0.75 ... 2.5	
Conductor insulation stripping length		mm	9	
Screw			M3.5	
Screw head			PZ2	
Tightening torque		Nm	0.8	

Connection diagram BR16 and BR30



Contactors KNL6(G)-KNL38(G)

Accessories

Thermal overload relay BR16

Setting ranges and maximum permitted back-up fuses

Setting range (A)	Max. back-up fuse gL/gG – UL 508 (A)	Max. back-up fuse gL/gG (A)
0.1 - 0.16	1	1
0.16 - 0.25	1	1
0.25 - 0.4	1	1
0.35 - 0.5	1	1
0.45 - 0.63	1	1
0.55 - 0.8	3	2
0.75 - 1	3	2
0.9 - 1.3	3	2
1.1 - 1.6	3	2
1.4 - 2	6	4
1.8 - 2.5	6	4
2.3 - 3.2	6	4
2.9 - 4	10	8
3.5 - 4.8	10	8
4.5 - 6.3	15	10
5.5 - 7.5	15	10
7.2 - 10	25	16
9 - 12.5	30	20
11.3 - 16	40	25
15 - 20	50	35

Thermal overload relay BR30

Setting ranges and maximum permitted back-up fuses

Setting range (A)	Max. back-up fuse gL/gG – UL 508 (A)	Max. back-up fuse gL/gG (A)
17.5 - 21.5	50	35
21 - 25	60	40
24.5 - 30	70	50
29 - 36	70	50
33 - 38	70	50

Tripping curve BR16 and BR30

