

AUXILIARY SUPPLY SUPERVISION RELAYS

Model RUT- 4 OP RUT-4 OP 2



Applications

Supervise only the auxiliary supply circuit of the protection equipments, avoiding false alarms due to short-time drop of supply

Connections	Construction characteristics		
Connections Content Connections Content Content	Timing Contacts no.	4 Changeover	
Weight (g) 265 Dimensions (mm) (A) 42,5 x (B) \$0.4 x (C) 96,6 { Flarge Type}) Coil characteristics Standard voltages ⁽ⁿ⁾ 24,4 8,72,110,125,220 Vdc 63.5,110,127,230 Vac 48,60,110,125 Vdc 63.5,110,127,230 Vac 49.00 V	Connections	4 8 13 5 9 (+) 2 14	
Dimensions (mm) (A) 42,5 x (B) 50,4 x (C) 96,6 (F large Type) Coil characteristics Coil characteristics Standard voltages ⁽¹⁾ 24, 48, 72, 110, 125, 220 Vdc 63.5, 110, 127, 230 Vac 48, 60, 110, 125 Vdc 63.5, 110, 127, 230 Vac Voltage range +10% -20% U ₁ Voltage limits See pick-up release voltage-temperature curves for standard relays Average consumptions in permanence 4,5 W Operating time Timing range Pick-up time < 20 ms < 35 ms Drop-out time To minimum voltage To maximum vo	Options	With OP options. See model selection table.	
Coil characteristics 244.48,72,110,125,220 Vdc 63.5,10,127,230 Vdc 63.5,10,125 Vdc 63.5,10,127,230 Vdc 63.	Weight (g)	265	
Standard voltages © 24, 48, 72, 110, 125, 220 Vdc 63.5, 110 Vdc 65.5, 11	Dimensions (mm)	(A) 42,5 x (B) 50,4 x (C) 96,6 (F large Type)	
Voltage Imits +10% -20% U _N Voltage limits See pick-up release voltage-temperature curves for standard relays Average consumptions in permanence 4,5 W Operating time To minimum voltage To maximum voltage To maxi	Coil characteristics		
Voltage limits See pick-up release voltage-temperature curves for standard relays Average consumptions in permanence Operating time Timing range Pick-up time To minimum voltage To maximum voltage To	Standard voltages (1)	24, 48, 72, 110, 125, 220 Vdc 63,5 , 110 , 127 , 230 Vac	48, 60, 110, 125 Vdc
Average consumptions in permanence Average consumptions in permanence Operating time Timing range Pick-up time To minimum voltage To maximum	Voltage range	+10% -20% U _N	
Operating time Timing range Pick-up time <20 ms <35 ms Drop-out time To minimum voltage To maximum voltage To maximu	Voltage limits		
Timing range Pick-up time	Average consumptions in permanence	4,5 W	
Contact type	Operating time		
To minimum voltage To maximum v	Timing range		
To minimum voltage To maximum voltage Seable To Maxi	Pick-up time	<20 ms	< 35 ms
Contact type 4 Changeover Contact material AgNi Contacts resistance (2) ≤30 mΩ Distance between contacts 1,8 mm Permanent current 80 A during 200 ms / 200 A during 10 ms Max. making capacity 40 A / 0.5 s / 110 Vdc Breaking capacity See breaking capacity curves (Contact Configuration Type A) Max. breaking capacity See value for 50.000 operations Umax opened contact 250 Vdc / 400 Vac Performance data -40°C +55°C Storage temperature -40°C +85°C Max. operating humidity 93% / +40°C			
Contact type 4 Changeover Contact material AgNi Contacts resistance (2) ≤30 mΩ Distance between contacts 1,8 mm Permanent current 10 A Instantaneous current 80 A during 200 ms / 200 A during 10 ms Max. making capacity 40 A / 0,5 s / 110 Vdc Breaking capacity See breaking capacity curves (Contact Configuration Type A) Max. breaking capacity See value for 50,000 operations U _{max} opened contact 250 Vdc / 400 Vac Performance data -40°C +55°C Storage temperature -40°C +85°C Max. operating humidity 93% / +40°C	Tolerance		
Contact material AgNi Contacts resistance (22) ≤30 mΩ Distance between contacts 1,8 mm Permanent current 10 A Instantaneous current 80 A during 200 ms / 200 A during 10 ms Max, making capacity 40 A / 0,5 s / 110 Vdc Breaking capacity See breaking capacity curves (Contact Configuration Type A) Max, breaking capacity See value for 50,000 operations U _{max} opened contact 250 Vdc / 400 Vac Performance data -40°C +55°C Storage temperature -40°C +85°C Max, operating humidity 93% / +40°C	Contacts		
Contacts resistance (2)≤30 mΩDistance between contacts1,8 mmPermanent current10 AInstantaneous current80 A during 200 ms / 200 A during 10 msMax, making capacity40 A / 0,5 s / 110 VdcBreaking capacitySee breaking capacity curves (Contact Configuration Type A)Max, breaking capacitySee value for 50.000 operationsUmax, opened contact250 Vdc / 400 VacPerformance data-40°C +55°COperating temperature-40°C +85°CStorage temperature-40°C +85°CMax, operating humidity93% / +40°C	Contact type	4 Changeover	
Distance between contacts Permanent current Instantaneous current Max. making capacity Breaking capacity Max. breaking capacity Max. breaking capacity Contact Configuration Type A) See value for 50.000 operations Umax. opened contact Performance data Operating temperature Storage temperature Max. operating humidity 1,8 mm 10 A 80 A during 200 ms / 200 A during 10 ms 40 A / 0,5 s / 110 Vdc See breaking capacity curves (Contact Configuration Type A) See value for 50.000 operations 250 Vdc / 400 Vac -40°C +55°C -40°C +85°C 93% / +40°C	Contact material	AgNi	
Permanent current 10 A Instantaneous current 80 A during 200 ms / 200 A during 10 ms Max, making capacity 40 A / 0,5 s / 110 Vdc Breaking capacity See breaking capacity curves (Contact Configuration Type A) Max. breaking capacity See value for 50.000 operations U _{max} opened contact 250 Vdc / 400 Vac Performance data Operating temperature -40°C +55°C Storage temperature -40°C +85°C Max. operating humidity 93% / +40°C	Contacts resistance (2)	≤30 mΩ	
Instantaneous current Max, making capacity Breaking capacity See breaking capacity curves (Contact Configuration Type A) Max. breaking capacity See value for 50.000 operations U _{max} opened contact Performance data Operating temperature Storage temperature Max. operating humidity See value for 50.000 operations 250 Vdc / 400 Vac -40°C +55°C 40°C +85°C 93% / +40°C	Distance between contacts	1,8 mm	
Max, making capacity Breaking capacity See breaking capacity curves (Contact Configuration Type A) Max, breaking capacity See value for 50,000 operations U _{max} opened contact Performance data Operating temperature Storage temperature Max, operating humidity 40 A / 0,5 s / 110 Vdc See value for 50,000 operations 250 Vdc / 400 Vac -40°C +55°C -40°C +55°C -40°C +85°C -40°C +85°C	Permanent current	10 A	
Breaking capacity See breaking capacity curves (Contact Configuration Type A) Max. breaking capacity See value for 50.000 operations 250 Vdc / 400 Vac Performance data Operating temperature Operating temperature Storage temperature Max. operating humidity See value for 50.000 operations 250 Vdc / 400 Vac -40°C +55°C -40°C +85°C 93% / +40°C	Instantaneous current	80 A during 200 ms / 200 A during 10 ms	
(Contact Configuration Type A) Max. breaking capacity See value for 50.000 operations U _{max} opened contact 250 Vdc / 400 Vac Performance data Operating temperature Storage temperature Max. operating humidity (Contact Configuration Type A) See value for 50.000 operations 250 Vdc / 400 Vac -40°C +85°C -40°C +85°C 93% / +40°C	Max, making capacity	40 A / 0,5 s / 110 Vdc	
U _{max} opened contact 250 Vdc / 400 Vac Performance data Operating temperature -40°C +55°C Storage temperature -40°C +85°C Max. operating humidity 93% / +40°C	Breaking capacity		
Performance data Operating temperature -40°C +55°C Storage temperature -40°C +85°C Max. operating humidity 93% / +40°C	Max. breaking capacity	See value for 50.000 operations	
Operating temperature -40°C +55°C Storage temperature -40°C +85°C Max. operating humidity 93% / +40°C	U _{max} opened contact	250 Vdc / 400 Vac	
Storage temperature -40°C +85°C Max. operating humidity 93% / +40°C	Performance data		
Max. operating humidity 93% / +40°C	Operating temperature	-40°C +55°C	
	Storage temperature	-40°C +85°C	:
Operating altitude ⁽³⁾ <2000 m	Max. operating humidity	93% / +40°C	
	Operating altitude ⁽³⁾	<2000 m	



Auxiliary relays | Tripping applications

⁽¹⁾ Other voltage upon request ⁽²⁾ Guarantee data for relays just manufactured ⁽³⁾ Ask for higher altitudes