

Equipment Room Temperature Control Relay

- Provides protection against variations of the ambient temperature (min/max) in equipment or lift rooms
- Suitable for use in Traction and Hydraulic Lift Types
- Supports an External sensor module
- LED Indication for Relay Trip & Power ON



Ordering Information


Cat. No.	Description
45A131AR	5°C to 40°C (Traction lift type), 230V AC, 1NO, External NTC two wire sensor. Base/DIN
45A231AR	5°C to 40°C (Traction lift type), 110V AC, 1NO, External NTC two wire sensor. Base/DIN
45A231ARN	5°C to 40°C (Traction lift type), 110V AC, 1NO, Without Sensor, Base/DIN
45D331AR	5°C to 40°C (Traction Lift Type), 24V DC, 1NO, External NTC two wire sensor. Base/DIN
45A131BR	15°C to 35°C (Hydraulic Lift Type), 230V AC, 1NO, External NTC two wire sensor. Base/DIN
45A231BR	15°C to 35°C (Hydraulic Lift Type), 110V AC, 1NO, External NTC two wire sensor. Base/DIN
45D331BR	15°C to 35°C (Hydraulic Lift Type), 24V DC, 1NO, External NTC two wire sensor. Base/DIN
45SP01	Accessory, NTC 2 wire sensor assembly with 2 sensors

Equipment Room Temperature Control Relay



Cat. No.	45A131AR	45A231AR	45D331AR
Parameters			
Supply Voltage (Φ)	230 VAC	110 VAC	24 VDC
Supply Variation	± 15%		
Frequency	47Hz - 63Hz		NA
Power Consumption (Max.)	10 VA	5 VA	1.2 W
Device Characteristics			
Accuracy	± 1°C		
Output Control Mode	Relay ON/OFF		
Relay ON Delay	10 sec (Fixed), ± 1sec		
Relay OFF Delay	10 sec (Fixed), ± 1sec		
Hysteresis	1°C		
Trip Level			
High Trip Level	+ 40°C		
Low Trip Level	+ 5°C		
LED Indication	ON - Power ON condition (Green Color) ON - Relay ON condition (Red Color)		

LED indications for errors observed

Error Condition	Red LED	Green LED
Sensor Break / Sensor Open	Blink @500ms	OFF
Model Selection	OFF	Blink @500ms
Flash Read Error	Blink @500ms	Blink @500ms
Contact Ratings	Terminal 15 – Pole, Terminal 16 – NC, Terminal 18 – NO, 8 Amp at 250VAC, 1Amp at 30VDC 3 KV Isolation between coil and contact	
Max Power Output Rating of Relay	1840 VA for AC / 30W for DC approx	
Operating Temperature	- 15° C to +60° C	
Storage Temperature	- 20° C to +70° C	
Humidity (Non Condensing)	95% (Rh)	
Enclosure	Flame Retardant UL94-V0	
Dimension (W x H x D) (in mm)	22.5 X 75 X 100.5	
Weight (unpacked)	100 g	
Mounting	Base / DIN rail	
Certification		
Degree of Protection	IP 20 for Terminals, IP 40 for Enclosure	

EMI / EMC

Harmonic Current Emissions	IEC 61000-3-2
ESD	IEC 61000-4-2
Radiated Susceptibility	IEC 61000-4-3
Electrical Fast Transients	IEC 61000-4-4
Surge	IEC 61000-4-5
Conducted Susceptibility	IEC 61000-4-6
Voltage Dips & Interruptions (AC)	IEC 61000-4-11
Conducted Emission	CISPR 14-1
Radiated Emission	CISPR 14-1

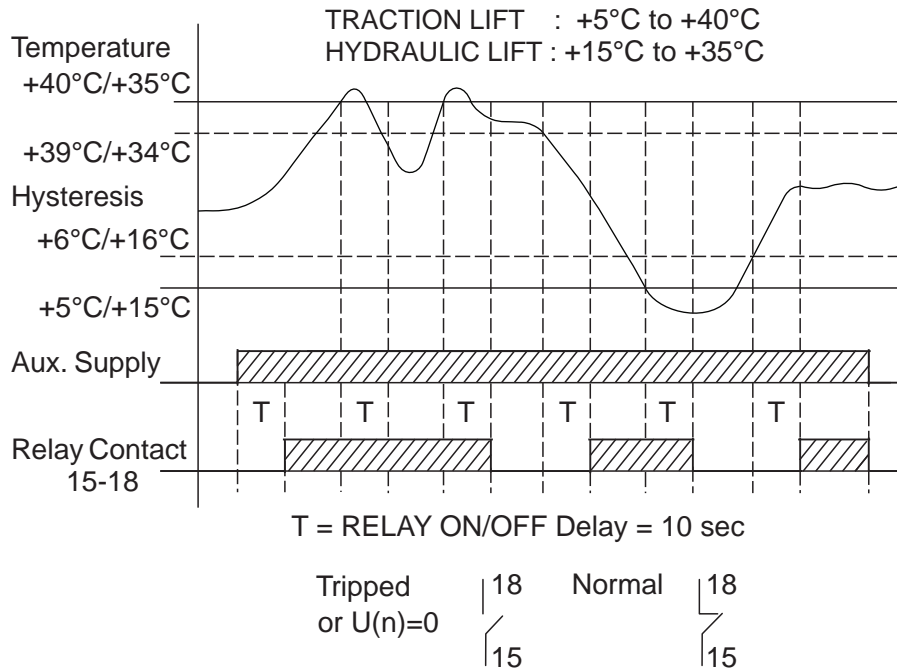
Environmental

Cold Heat	IEC 60068-2-1
Dry Heat	IEC 60068-2-2
Vibration	IEC 60068-2-6
Repetitive Shock	IEC 60068-2-27
Non-Repetitive Shock	IEC 60068-2-27

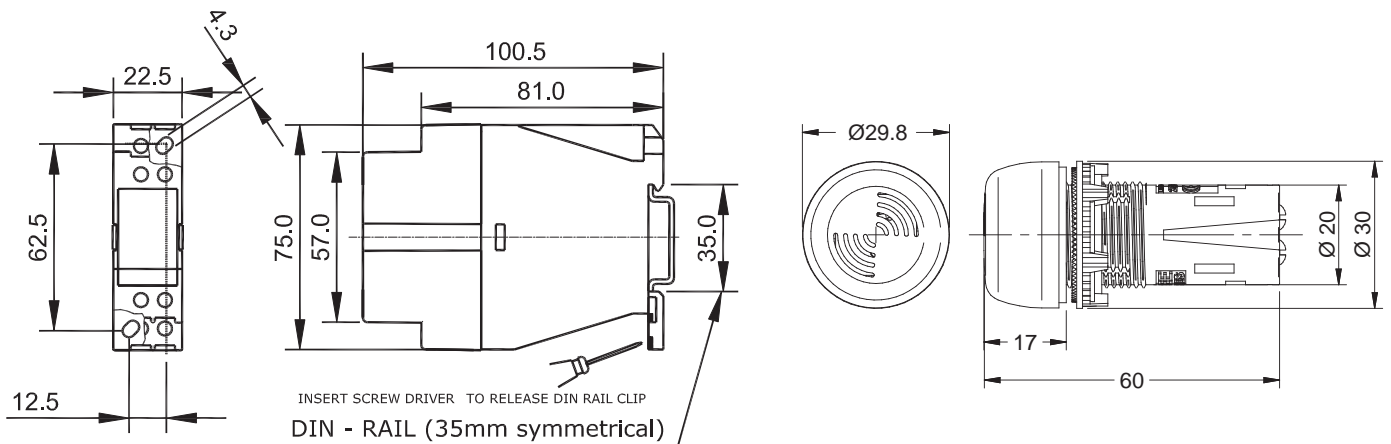
Equipment Room Temperature Control Relay



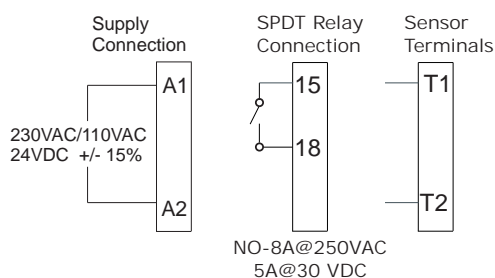
FUNCTION DIAGRAM



MOUNTING DIMENSIONS (mm)



CONNECTION DIAGRAM



TERMINAL TORQUE & CAPACITY

For 8 and 12 terminal 225

	0.6 Nm (7 lb.in)
Ø3.5.....4.0mm	
	1 x 1...4mm ² solid wire/single wire ferrule
	2 x 0.5 ... 2.5 mm ² insulated twin type ferrule
AWG	1 x 17 to 11