

**Thermistor overload relay for machine protection, 24-240V50/60HZ/DC**



**Part no.** EMT6-DB  
**Catalog No.** 066167  
**Eaton Catalog No.** EMT6-DB  
**EL-Nummer (Norway)** 4110420

## Delivery program

Product range				EMT6 thermistor overload relay for machine protection
Function				Selector switch with/without manual reset For manual or remote resetting Test button Mains and fault LED display
<b>Rated operational current</b>				
AC-15				
240 V	$I_e$	A		3
AC--14				
300 V	$I_e$	A		3
400 V	$I_e$	A		3
				Value applies starting with release 001.
conventional thermal current	$I_{th}$	A		6
Rated control voltage	$U_s$	V		24 - 240 V 50 - 400 Hz 24 - 240 V DC
<b>Notes</b>				
Observe manual MN03407006Z-DE/EN.				
Can be snap fitted on a top-hat rail to IEC/EN 60715.				

## Technical data

<b>General</b>				
Standards				IEC/EN 60947, VDE 0660, EN 55011
Climatic proofing				Damp heat, constant, to IEC 60068-2-78; Damp heat, cyclic, to IEC 60068-2-30
Ambient temperature				
Open		°C		-25 - +60
Enclosed		°C		- 25 - 45
Storage		°C		- 45 - 85
Mounting position				As required
Weight		kg		0.15
Mechanical shock resistance half-sinusoidal shock 10 ms to IEC 60068-2-27		g		10
Degree of Protection				IP20
Protection against direct contact when actuated from front (EN 50274)				Finger and back-of-hand proof
Safe isolation to EN 61140				
between the contacts		V AC		250
between contacts and power supply		V AC		250

## Auxiliary and control circuits

Rated impulse withstand voltage	$U_{imp}$	V AC		4000
Rated impulse withstand voltage	$U_{imp}$	V AC		6000
				Value applies starting with release 001.
Overvoltage category/pollution degree				III/3
Terminal capacities Auxiliary and control circuits				
Solid		mm <sup>2</sup>		1 x (0.5 - 2.5) 2 x (0.5 - 1.5)
Flexible with ferrule		mm <sup>2</sup>		1 x (0.5 - 2.5) 2 x (0.5 - 1.5)
Solid or stranded		AWG		20 - 14
Terminal screw				M3.5
Tightening torque		Nm		1.2

Tools			
Pozidriv screwdriver		Size	2
Standard screwdriver		mm	1 x 6

### Auxiliary power circuit

Rated insulation voltage	$U_i$	V	300
Rated insulation voltage	$U_i$	V	400
			Value applies starting with release 001.
Rated operational current	$I_e$	A	
AC--14			
Make contact			
300 V	$I_e$	A	3
380 V 400 V 415 V	$I_e$	A	3
			Value applies starting with release 001.
Break contact			
300 V	$I_e$	A	3
380 V 400 V 415 V	$I_e$	A	3
			Value applies starting with release 001.
AC-15			
Make contact			
220 V 230 V 240 V	$I_e$	A	3
300 V	$I_e$	A	1
380 V 400 V 415 V	$I_e$	A	1
			Value applies starting with release 001.
Break contact			
220 V 230 V 240 V	$I_e$	A	3
300 V	$I_e$	A	1
380 V 400 V 415 V	$I_e$	A	1
			Value applies starting with release 001.
Max. short-circuit protective device			
Fuse	gG/gL	A	6

### Control circuit

Rated insulation voltage	$U_i$	V	240
Rated operational voltage	$U_e$	V	240
Pick-up and drop-out values		x $U_e$	0.85 - 1.1
Power consumption			
AC		VA	3.5
DC		W	2
Trip at approx.		$\Omega$	3600
Recovery at approx.		$\Omega$	1600

### Electromagnetic compatibility (EMC)

Electrostatic discharge (ESD)			
applied standard			IEC/EN 61000-4-2
Air discharge		kV	8
Contact discharge		kV	6
Electromagnetic fields (RFI)			
applied standard			IEC/EN 61000-4-3
		V/m	80 - 1000 MHz: 10 1.4 - 2 GHz: 3 2.0 - 2.7 GHz: 1
Radio interference suppression			
			EN 55011 Class B
Burst		kV	Supply cables: 2 Signal cables: 1 according to IEC/EN 61000-4-4
power pulses (Surge)			
			2 kV (symmetrical) 4 kV (asymmetrical) according to IEC/EN 61000-4-5
Immunity to line-conducted interference to (IEC/EN 61000-4-6)			
		V	10

## Design verification as per IEC/EN 61439

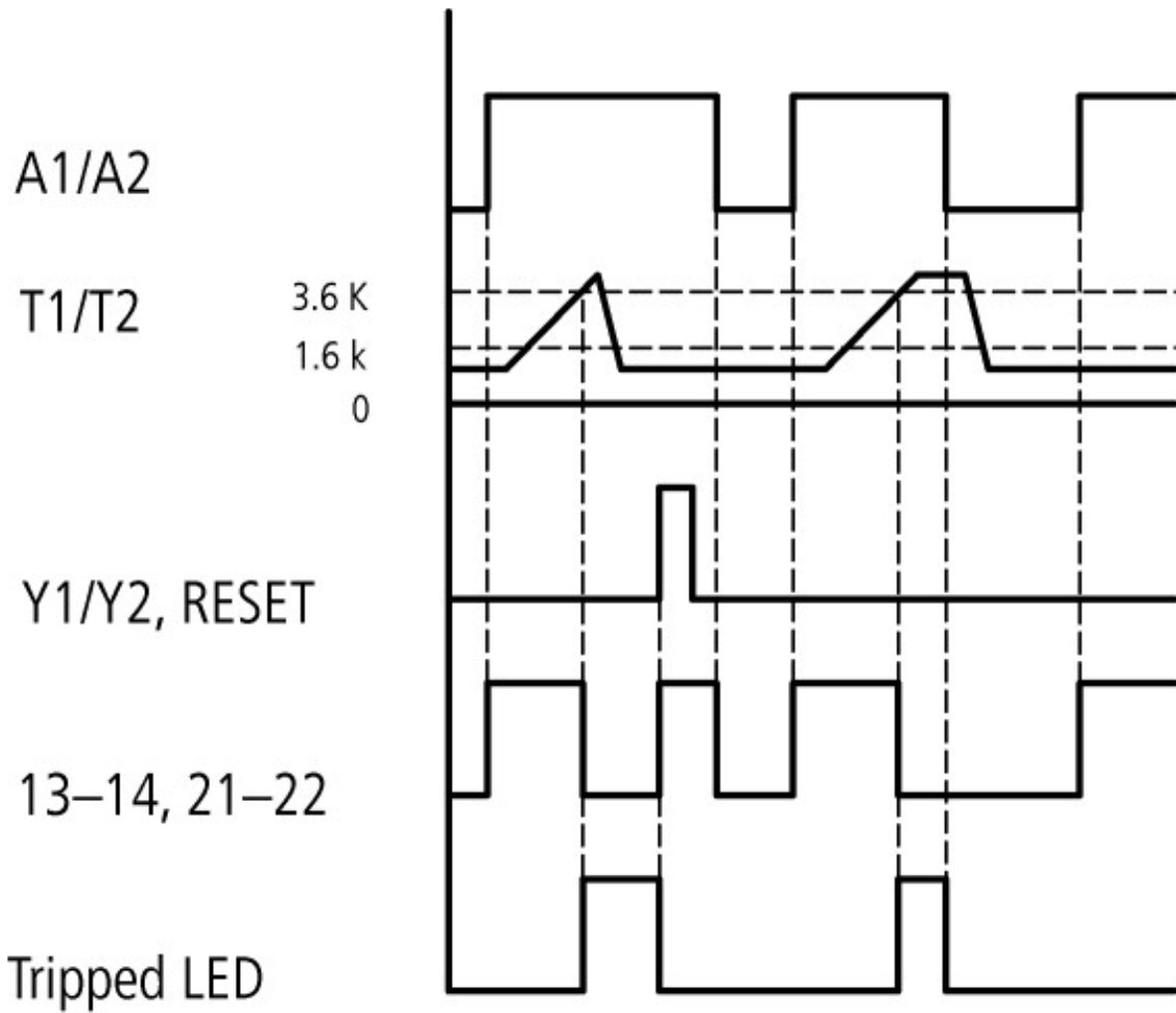
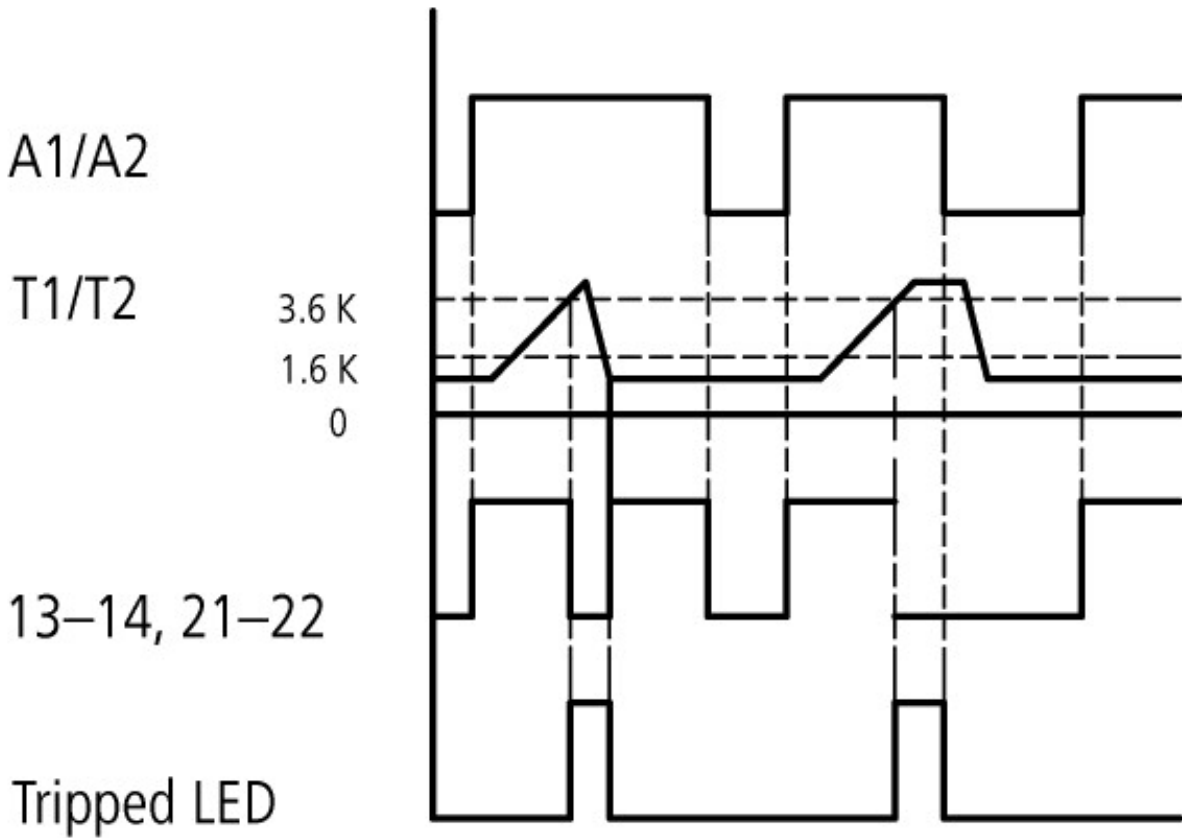
Technical data for design verification		
Operating ambient temperature min.	°C	-25
Operating ambient temperature max.	°C	60

## Technical data ETIM 6.0

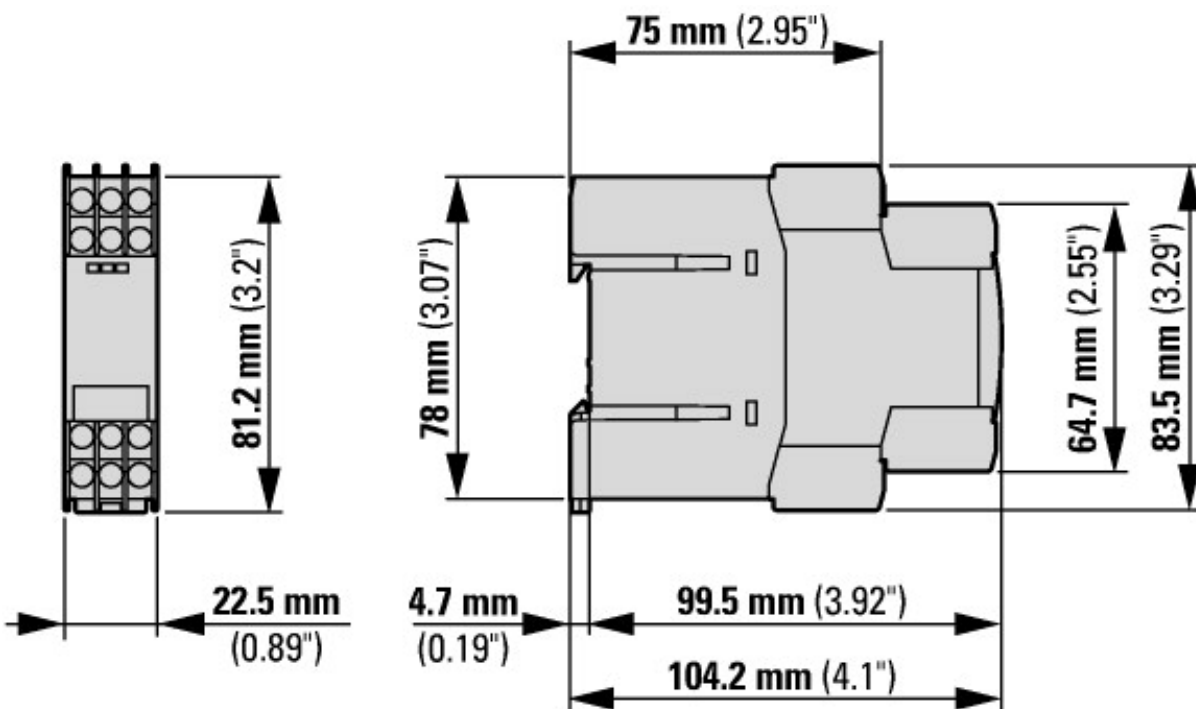
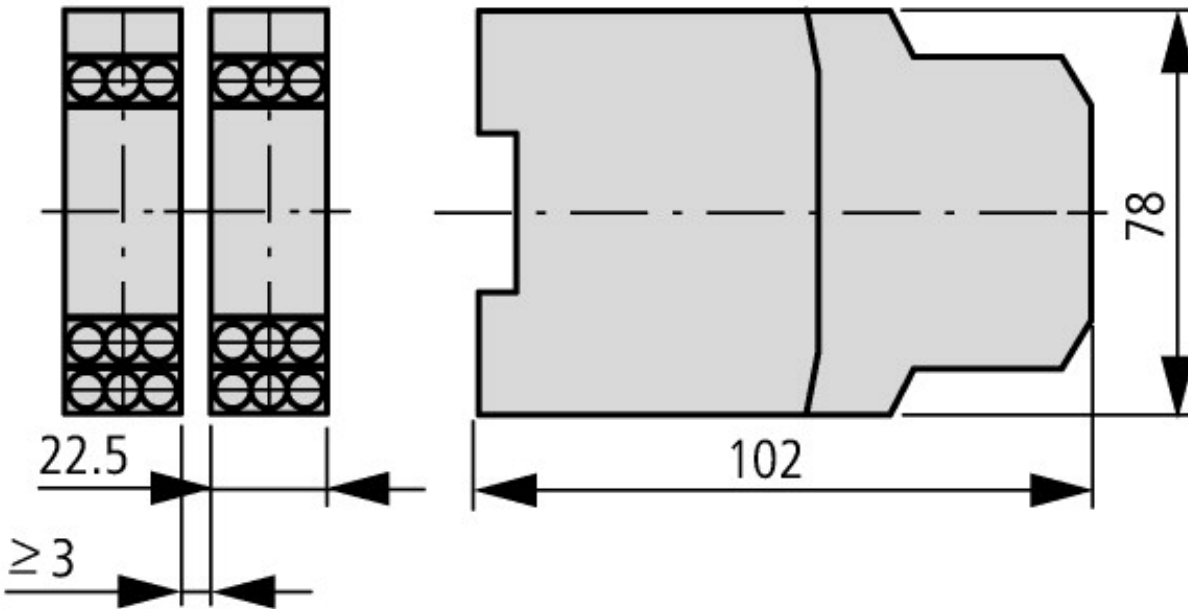
Relays (EG000019) / Temperature monitoring relay (EC001446)		
Electric engineering, automation, process control engineering / Low-voltage switch technology / Monitoring equipment (low-voltage switch technology) / Temperature monitoring equipment (ec1@ss8.1-27-37-18-10 [AKF104011])		
Type of electric connection		Screw connection
Rated control supply voltage Us at AC 50HZ	V	24 - 240
Rated control supply voltage Us at AC 60HZ	V	24 - 240
Rated control supply voltage Us at DC	V	24 - 240
Voltage type for actuating		AC/DC
With detachable clamps		No
Number of measuring circuits		1
Error registration possible		No
External reset possible		Yes
Number of contacts as normally closed contact		1
Number of contacts as normally open contact		1
Number of contacts as change-over contact		0
Width	mm	23
Height	mm	84
Depth	mm	104

## Approvals

Product Standards		UL 508; CSA-C22.2 No. 14; IEC/EN 60947-8; CE marking
UL File No.		E29184
UL Category Control No.		NKCR
CSA File No.		12528
CSA Class No.		3211-03
North America Certification		UL listed, CSA certified
Specially designed for North America		No
Max. Voltage Rating		600 V AC
Degree of Protection		IEC: IP20, UL/CSA Type: -



## Dimensions



Applies to release 001 and higher

## Additional product information (links)

### IL03407100Z (AWA2327-1454) thermistor overload relay for machine protection

IL03407100Z (AWA2327-1454) thermistor overload relay for machine protection

[ftp://ftp.moeller.net/DOCUMENTATION/AWA\\_INSTRUCTIONS/IL03407100Z2016\\_05.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407100Z2016_05.pdf)

### MN03407006Z (AWB2327-1446) EMT6 machine protection relays - overload monitoring for machines in Ex e areas

MN03407006Z (AWB2327-1446) EMT6 machine protection relays - overload monitoring for machines in Ex e areas - Deutsch / English

[ftp://ftp.moeller.net/DOCUMENTATION/AWB\\_MANUALS/MN03407006Z\\_DE\\_EN.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN03407006Z_DE_EN.pdf)

terminal markings and sensor circuit

<http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=6.21>