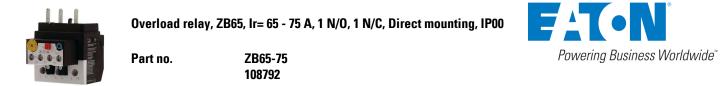
DATASHEET - ZB65-75



Protect same External Action Starts 78 Thermal events at range of the second starts 78 Thermal events at range of the second starts 78 Thermal events at range of the second starts 78 Thermal events at range of the second starts 78 Thermal events of range of the second starts 78 Thermal events 78 Thermal event for thermal events 78 Thermal event for the second	General specifications	
EN 01000 000123 Ponduct haiphtlagen 0200 000100 000100 Ponduct haiphtlagen 0200 000000000000000000000000000000000	Product name	Eaton Moeller® series ZB Thermal overload relay
Product Langb/Oepth Smillinetice Product Verbact Verba	Part no.	ZB65-75
Product high Image: Comparison of Compar	EAN	4015081084128
Preduct vesight Exceller selection Preduct vesight C2 Missignam Preduct vesight C2 Missignam Preduct vesight Sample selection Preduct vesight Sample s	Product Length/Depth	88 millimetre
Product weight List kiogram Gerthications List kiogram Gerthications List kiogram Gerthications List kiogram Fostict Trademame Edited State St	Product height	75 millimetre
Current control Metri MCR UL Support Control Metri MCR UL Support Control Metri MCR UL Support Control Metri MCR UL Support Control Metri MCR UL Support Control Metri MCR Product Tradename Control Metri	Product width	60 millimetre
Product Tradename 20 Features & Functions 20 Product Tradename 25 °C Ambient operating temperature (accessed) - nin 20 °C Ambient operating temperature (accessed) - nin <td< td=""><td>Product weight</td><td>0.23 kilogram</td></td<>	Product weight	0.23 kilogram
Product System Thermal overload relay Product Sub Type None Catalog Notes None Catalog Notes Ambient or temperature (accounting temperature) to ECEN 8089, FIS - 5 to + 55°C, Ambient or perature (accounting to ECEN 8097, VDE 6000 Part 102) Features & Functions Features Features and switch-off conditions based on DC:33, time constant as specification as unrent. Switch-on and switch-off conditions based on DC:33, time constant as specification manual/auto for fore relass publication manual/auto for fore relass for the sensitivity (according to ECEN 8094, VDE 6000 Part 102) General information Image off the sensitivity (according to ECEN 8094, VDE 6000 Part 102) Ambient operating temperature - max Image off the sensitivity (according to ECEN 8094, VDE 6000 Part 102) Ambient operating temperature - max Image off the sensitivity (according to ECEN 8094, VDE 6000 Part 102) Ambient operating temperature (acclosed) - max Image off the sensitivity (according to ECEN 8094, VDE 6000 Part 102) Class Image off the sensitivity (according to ECEN 8094, VDE 6000 Part 102) Degree of protection Image off the sensitivity (according to ECEN 8094, VDE 6000 Part 102) Degree of protection Image off the sensitivity (according to ECEN 8094, VDE 6000 Part 102) Overload release current setting - min Image off the sensentene sensitivity (acc		UL 60947-4-1 UL File No.: E29184 CSA-C22.2 No. 60947-4-1-14 CSA File No.: 012528 VDE 0660 CSA CE UL IEC/EN 60947 IEC/EN 60947-4-1 CSA Class No.: 3211-03
Product Sub Type Image: Sub Type Catslog Notes Ambient air temperature Operating range to IEC/EN 80847, PTB - 5°C to .5°C Ambient air temperature Operating range to IEC/EN 80847, PTB - 5°C to .5°C Ambient air temperature Conditions based on DC-13, the conditions based on DC-13	Product Tradename	ZB
Catalog Notes Ambient air temperature: Operating range to IEC/EN 66947, PTB: -57 Cto .55° C. Features & Functions Features Features & Functions Features Ambient operating temperature (according to IEC/EN 66947, PTB: -57 Cto .55° C. Ambient operating temperature (according to IEC/EN 66947, VDE 0660 Part 102) Ambient operating temperature (according to IEC/EN 66947, VDE 0660 Part 102) Features Ambient operating temperature (according to IEC/EN 66947, VDE 0660 Part 102) Features Ambient operating temperature (according to IEC/EN 66947, VDE 0660 Part 102) Features Ambient operating temperature (acclosed) - max So C C C C Ambient operating temperature (acclosed) - max So C C C C Class Class Class C C C C Degree of protection Part C C COS C C C C Mounting method Class C C C C C C Overodat release current setting - min Class C C C C C C C C C C C C C C C C C C	Product Type	Thermal overload relay
Ambient operations temperature (according to IEC/EN 60947) Features & Functions Features Features Ambient operations the specified. Second Information General information Ambient operations the specified. Ambient operating temperature min Ambient operating temperature max Ambient operating temperature (acclosed) - min Class Class Class Deare of protection Particle proofing Deare of protection Frame size Mounting method Overload rolesse current setting - min	Product Sub Type	None
Features Features <td< td=""><td>Catalog Notes</td><td>Ambient operating temperature (according to IEC/EN 60947) Rated operational current: Switch-on and switch-off conditions based on DC-13,</td></td<>	Catalog Notes	Ambient operating temperature (according to IEC/EN 60947) Rated operational current: Switch-on and switch-off conditions based on DC-13,
Reset publication	Features & Functions	
Ambient operating temperature - max 5° °C Ambient operating temperature (enclosed) - min 2° °C Ambient operating temperature (enclosed) - max 40° °C Class CLASS 10 A Dimetic proofing Damp heat, constant, to IEC 60068-2-78 Degree of protection PP0 Frame size ZB65 Mounting method Degree of protection, enclosed, - max Overload release current setting - min 65 A Overload release current setting - min 65 A Overload release current setting - max 75 A Overload release current setting - max 75 A Product category III Product category Soverload relay ZB up to 150 A Protection Finger and back-of-hand proof, Protection against direct contact when actuated from from f(EN 50274) Rated impulse withstand voltage (Uimp) Soverload relay ZB up to 150 A Stock resistance 10 g. Mechanical, Sinusoidal, Shock duration 10 ms Suitable for 10 g. Mechanical, Sinusoidal, Shock duration 10 ms Suitable for 25 %K, residual error for T > 40°		Reset pushbutton manual/auto Trip-free release
Ambient operating temperature (enclosed) - min 25 °C Ambient operating temperature (enclosed) - max 40 °C Class CLASS 10 A Climatic proofing Damp heat, constant, to IEC 60068-2-38 Degree of protection IP00 Frame size ZB65 Mounting method Direct mounting Direct attachment Overload release current setting - min 65 A Overload release current setting - min 55 A Overload release current setting - min 56 A Overload release current setting - min Frame Size Product category III Pollution degree Frade category Product category Finger and back-of-hand proof, Protection against direct contact when actuated from from t(EN S0274) Rated impulse withstand voltage (Uimp) Enger and back-of-hand proof, Protection against direct contact when actuated from from t(EN S0274) Shock resistance 10 g, Mechanical, Sinusoidal, Shock duration 10 ms Suitable for Branch circuits, (UI/CSA) Temperature compensation So 25 %/K, residual error for T > 40°	Ambient operating temperature - min	-25 °C
Ambient operating temperature (enclosed) - max 0 ° C Class CLASS 10 A Climatic proofing Damp heat, constant, to IEC 60068-2-78 Degree of protection IP00 Frame size IP00 Mounting method Direct mounting Overload release current setting - min 65 A Overload release current setting - max 65 A Overload release current setting - max Accessories Overload release current setting - max Accessories Polution degree 3 Product category Finger and back-of-hand proof, Protection against direct contact when actuated from front (EN S0274) Rated inpulse withstand voltage (Uimp) Mounting Shock resistance 10 g, Mechanical, Sinusoidal, Shock duration 10 ms Suitable for 10 g, Mechanical, Sinusoidal, Shock duration 10 ms Suitable for Eranch circuits, (UU/CSA) Temperature compensation 62 5%/K, residual error for T > 40°	Ambient operating temperature - max	55 °C
Class CLASS 10 A Climatic proofing Damp heat, constant, to IEC 60068-2-38 Degree of protection IP00 Frame size ZB65 Mounting method Direct mounting Direct attachment Overload release current setting - min 65 A Overload release current setting - max FA Pollution degree 3 Product category III Product category Finger and back-of-hand proof, Protection against direct contact when actuated friend relay ZB up to 150 A Rated impulse withstand voltage (Uimp) 4000 V (auxiliary and control circuits) 6000 V AC Shock resistance 10 g. Mechanical, Sinusoidal, Shock duration 10 ms Suitable for Branch circuits, (UL/CSA) Temperature compensation 4000 V (auxile error for T > 40°	Ambient operating temperature (enclosed) - min	25 °C
Climatic proofing Damp heat, constant, to IEC 60068-2-78 Degree of protection IP00 Frame size ZB65 Mounting method Direct mounting Overload release current setting - min 65 A Overload release current setting - max 75 A Overload release current setting - max 75 A Overload release current setting - max Accessories Overload release current setting - max Forduct category Pollution degree 3 Product category Finger and back-of-hand proof, Protection against direct contact when actuated from from (EK 50274) Rated impulse withstand voltage (Uimp) Mouth (Uimp) Shock resistance 00 (Accessories Courtent) Suitable for Branch circuits, (UL/CSA) Temperature compensation Social (Circuits) Temperature compensation Social (Circuits) Overload relay 25 (K, residual error for T > 40°	Ambient operating temperature (enclosed) - max	40 °C
Degree of protection Poo Frame size ZB65 Mounting method Direct mounting Direct attachment Overload release current setting - min 65 A Overload release current setting - max 75 A Overload release current setting - max III Overload release current setting - max Saccessories Overload release current setting - max Pollution degree Saccessories Overload relay ZB up to 150 A Protection Finger and back-of-hand proof, Protection against direct contact when actuated from from t(EN 50274) Protection House A control circuits) 6000 V Ac Shock resistance House A control circuits) 6000 V Ac Suitable for In g. Mechanical, Sinusoidal, Shock duration 10 ms Temperature compensation Sac St %/K, residual error for T > 40°	Class	CLASS 10 A
Frame size ZB65 Mounting method Direct mounting Direct attachment Overload release current setting - min 65 A Overload release current setting - max 75 A Overload release current setting - max 111 Pollution degree 3 Product category III Product category Accessories Overload relay ZB up to 150 A Protection Finger and back-of-hand proof, Protection against direct contact when actuated from front (EN 50274) Rated impulse withstand voltage (Uimp) 4000 V (auxiliary and control circuits) 6000 V AC Shock resistance 10 g, Mechanical, Sinusoidal, Shock duration 10 ms Suitable for Branch circuits, (UL/CSA) Temperature compensation < 225 %/K, residual error for T > 40°	Climatic proofing	
Mounting method Direct mounting Direct attachment Overload release current setting - min 65 A Overload release current setting - max 65 A Overload release current setting - max 10 B Pollution degree 10 B Pollution degree 3 Product category Saccessories Overload relay ZB up to 150 A Froetcion Finger and back-of-hand proof, Protection against direct contact when actuated from front (EN 50274) Rated impulse withstand voltage (Uimp) 4000 V (auxiliary and control circuits) Shock resistance 10 g, Mechanical, Sinusoidal, Shock duration 10 ms Suitable for Branch circuits, (UL/CSA) Temperature compensation 525 %/K, residual error for T > 40°	Degree of protection	IP00
Overload release current setting - min 55 A Overload release current setting - max 55 A Overvoltage category 11 Pollution degree 3 Product category Accessories Overload releay ZB up to 150 A Protection Finger and back-of-hand proof, Protection against direct contact when actuated from from t(EN 50274) Rated impulse withstand voltage (Uimp) 4000 V (auxiliary and control circuits) 6000 V AC Shock resistance 10 g, Mechanical, Sinusoidal, Shock duration 10 ms Suitable for 525 %/K, residual error for T > 40°	Frame size	ZB65
Overload release current setting - max 75 A Overvoltage category III Pollution degree 3 Product category Accessories Overload relay ZB up to 150 A Protection Finger and back-of-hand proof, Protection against direct contact when actuated from front (EN 50274) Rated impulse withstand voltage (Uimp) 4000 V (auxiliary and control circuits) 6000 V AC Shock resistance 10 g, Mechanical, Sinusoidal, Shock duration 10 ms Suitable for Branch circuits, (UL/CSA) Temperature compensation 205 %/K, residual error for T > 40°	Mounting method	
Overvoltage category III Pollution degree 3 Product category Accessories Overload relay ZB up to 150 A Protection Finger and back-of-hand proof, Protection against direct contact when actuated from from (EN 50274) Rated impulse withstand voltage (Uimp) Mode the sector of the se	-	65 A
Pollution degree 3 Product category Accessories Overload relay ZB up to 150 A Protection Finger and back-of-hand proof, Protection against direct contact when actuated from front (EN 50274) Rated impulse withstand voltage (Uimp) 4000 V (auxiliary and control circuits) 6000 V AC Shock resistance 10 g, Mechanical, Sinusoidal, Shock duration 10 ms Suitable for Branch circuits, (UL/CSA) Temperature compensation < 2.25 %/K, residual error for T > 40°	Overload release current setting - max	75 A
Product category Accessories Overload relay ZB up to 150 A Protection Finger and back-of-hand proof, Protection against direct contact when actuated from front (EN 50274) Rated impulse withstand voltage (Uimp) 4000 V (auxiliary and control circuits) 6000 V AC Shock resistance 10 g, Mechanical, Sinusoidal, Shock duration 10 ms Suitable for Branch circuits, (UL/CSA) Temperature compensation < 0.25 %/K, residual error for T > 40°	Overvoltage category	
Protection Finger and back-of-hand proof, Protection against direct contact when actuated from front (EN 50274) Rated impulse withstand voltage (Uimp) 4000 V (auxiliary and control circuits) 6000 V AC Shock resistance 10 g, Mechanical, Sinusoidal, Shock duration 10 ms Suitable for Branch circuits, (UL/CSA) Temperature compensation < 0.25 %/K, residual error for T > 40°	Pollution degree	3
Rated impulse withstand voltage (Uimp) Image: Constraint of the second	Product category	
Shock resistance 6000 V AC Shock resistance 10 g, Mechanical, Sinusoidal, Shock duration 10 ms Suitable for Branch circuits, (UL/CSA) Temperature compensation 60.25 %/K, residual error for T > 40°	Protection	
Suitable for Branch circuits, (UL/CSA) Temperature compensation ≤ 0.25 %/K, residual error for T > 40°	Rated impulse withstand voltage (Uimp)	
Temperature compensation ≤ 0.25 %/K, residual error for T > 40°	Shock resistance	10 g, Mechanical, Sinusoidal, Shock duration 10 ms
	Suitable for	Branch circuits, (UL/CSA)
	Temperature compensation	

Terminal capacities	
Terminal capacity (flexible with ferrule)	2 x (0.75 - 2.5) mm², Control circuit cables 1 × (1 - 25) mm², Main cables 2 x (1 - 25) mm², Main cables 1 x (0.75 - 2.5) mm², Control circuit cables
Terminal capacity (solid)	2 x (1 - 16) mm ² , Main cables 2 x (0.75 - 4) mm ² , Control circuit cables 1 x (0.75 - 4) mm ² , Control circuit cables 1 x (1 - 16) mm ² , Main cables
Terminal capacity (solid/stranded AWG)	14 - 2, Main cables 2 x (18 - 14), Control circuit cables
Terminal capacity (stranded)	1 x (16 - 25) mm², Main cables
Stripping length (main cable)	11 mm
Stripping length (control circuit cable)	8 mm
Screw size	M3.5, Terminal screw, Control circuit cables M6, Terminal screw, Main cables
Screwdriver size	1 x 6 mm, Terminal screw, Standard screwdriver 2, Terminal screw, Pozidriv screwdriver
Tightening torque	3.5 Nm, Screw terminals, Main cables 1.2 Nm, Screw terminals, Control circuit cables
Electrical rating	
Conventional thermal current ith of auxiliary contacts (1-pole, open)	6 A
Rated operational current (Ie) at AC-15, 120 V	1.5 A
Rated operational current (Ie) at AC-15, 220 V, 230 V, 240 V	1.5 A
Rated operational current (Ie) at AC-15, 380 V, 400 V, 415 V	0.9 A
Rated operational current (Ie) at DC-13, 110 V	0.4 A
Rated operational current (Ie) at DC-13, 220 V, 230 V	0.2 A
Rated operational current (Ie) at DC-13, 24 V	0.9 A
Rated operational current (Ie) at DC-13, 60 V	0.75 A
Rated operational voltage (Ue) - max	690 V
Safe isolation	440 V AC, Between auxiliary contacts and main contacts, According to EN 61140 440 V AC, Between main circuits, According to EN 61140 240 V AC, Between auxiliary contacts, According to EN 61140
Switching capacity (auxiliary contacts, pilot duty)	B600 at opposite polarity, AC operated (UL/CSA) B300 at opposite polarity, AC operated (UL/CSA) R300, DC operated (UL/CSA)
Voltage rating - max	600 V AC
Short-circuit rating	
Short-circuit current rating (basic rating)	200 A, max. Fuse, SCCR (UL/CSA) 150 A, max. CB, SCCR (UL/CSA) 10 kA, SCCR (UL/CSA)
Short-circuit current rating (high fault at 480 V)	65 kA, CB, SCCR (UL/CSA) 100 kA, Fuse, SCCR (UL/CSA) 100 A, max. CB, SCCR (UL/CSA) 125 A, Class J/CC, max. Fuse, SCCR (UL/CSA)
Short-circuit current rating (high fault at 600 V)	100 kA, Fuse, SCCR (UL/CSA) 125 A, Class J/CC, max. Fuse, SCCR (UL/CSA)
Short-circuit protection rating	Max. 6 A gG/gL, fuse, Without welding, Auxiliary and control circuits 125 A gG/gL, Fuse, Type "2" coordination 200 A gG/gL, Fuse, Type "1" coordination
Contacts	
Number of auxiliary contacts (change-over contacts)	0
Number of auxiliary contacts (normally closed contacts)	1
Number of auxiliary contacts (normally open contacts)	1
Number of contacts (normally closed contacts)	1
Number of contacts (normally open contacts)	1
Design verification	
Equipment heat dissipation, current-dependent Pvid	14.4 W
Heat dissipation capacity Pdiss	0 W
Heat dissipation per pole, current-dependent Pvid	4.8 W
Rated operational current for specified heat dissipation (In)	75 A
Static heat dissipation, non-current-dependent Pvs	0 W
10.2.2 Corrosion resistance	Meets the product standard's requirements.

10.2.3.1 Verification of thermal stability of enclosures	Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat	Meets the product standard's requirements.
10.2.3.3 Resist. of insul. mat. to abnormal heat/fire by internal elect. effects	Meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation	Meets the product standard's requirements.
10.2.5 Lifting	Does not apply, since the entire switchgear needs to be evaluated.
10.2.6 Mechanical impact	Does not apply, since the entire switchgear needs to be evaluated.
10.2.7 Inscriptions	Meets the product standard's requirements.
10.3 Degree of protection of assemblies	Does not apply, since the entire switchgear needs to be evaluated.
10.4 Clearances and creepage distances	Meets the product standard's requirements.
10.5 Protection against electric shock	Does not apply, since the entire switchgear needs to be evaluated.
10.6 Incorporation of switching devices and components	Does not apply, since the entire switchgear needs to be evaluated.
10.7 Internal electrical circuits and connections	Is the panel builder's responsibility.
10.8 Connections for external conductors	Is the panel builder's responsibility.
10.9.2 Power-frequency electric strength	Is the panel builder's responsibility.
10.9.3 Impulse withstand voltage	Is the panel builder's responsibility.
10.9.4 Testing of enclosures made of insulating material	Is the panel builder's responsibility.
10.10 Temperature rise	The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
10.11 Short-circuit rating	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.12 Electromagnetic compatibility	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.13 Mechanical function	The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

Technical data ETIM 9.0

Low-voltage industrial components (EG000017) / Thermal overload relay (EC000106)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Overload protection device / Thermal overload relay (ecl@ss13-27-37-15-01 [AKF075019])				
Adjustable current range	A	65 - 75		
Max. rated operation voltage Ue	V	690		
Mounting method		Direct attachment		
Type of electrical connection of main circuit		Screw connection		
Number of auxiliary contacts as normally closed contact		1		
Number of auxiliary contacts as normally open contact		1		
Number of auxiliary contacts as change-over contact		0		
Release class		CLASS 10 A		
Reset function input		No		
Reset function automatic		Yes		
Reset function push-button		Yes		