## Contactor relay, 24 V 50 Hz, 3 N/O, 1 NC, Screw terminals, AC operation



Part no. DILA-31(24V50HZ)

276351

4130204 **EL Number** 

(Norway)

Powering Business Worldwide

(Norway)	
General specifications	
Product name	Eaton Moeller® series DILA Control Relay
Part no.	DILA-31(24V50HZ)
EAN	4015082763510
Product Length/Depth	75 millimetre
Product height	68 millimetre
Product width	45 millimetre
Product weight	0.24 kilogram
Compliances	CE Marked
Certifications	CSA Std. C22.2 No. 14-05 IEC 60947-4-1 UL 508 EN 60947-4-1 VDE CSA-C22.2 No. 14-05 UL CSA File No.: 012528 EN 60947-5-1 CSA CSA Class No.: 3211-03 UL Category Control No.: NKCR VDE 0660 IEC/EN 60947-4-1 UL File No.: E29184 CE IEC/EN 60947
Product Tradename	DILA
Product Type	Control Relay
Product Sub Type	None
Catalog Notes	Coil terminal markings according to EN 50005 Contact numbers according to EN 50011 Rated operational current: Switch-on and switch-off conditions based on DC-13, time constant as specified.
Features & Functions	
Features	Positive operating contacts to EN 60947-5-1 appendix L, including auxiliary contact module
Fitted with:	Positive operation contacts
General information	
Application	Contactor relays
Degree of protection Shock resistance	P20 7 g, N/O auxiliary contact, Basic unit with auxiliary contact module, Mechanical, according to IEC/EN 60068-2-27, Half-sinusoidal shock 10 ms 5 g, N/C auxiliary contact, Basic unit with auxiliary contact module, Mechanical, according to IEC/EN 60068-2-27, Half-sinusoidal shock 10 ms
Lifespan, mechanical	20,000,000 Operations (AC operated)
Mounting method	Screw
Operating frequency	9000 Operations/h
Overvoltage category	III
Pollution degree	3
Product category	DILA relays
Protection	Finger and back-of-hand proof, Protection against direct contact when actuated from front (EN 50274)
Rated impulse withstand voltage (Uimp)	6000 V AC
Voltage type	AC
Climatic environmental conditions	
Ambient operating temperature - min	-25 °C
Ambient operating temperature - max	60 °C

Ambient operating temperature (enclosed) - min	25 °C
Ambient operating temperature (enclosed) - max	40 °C
Ambient storage temperature - min	40 °C
Ambient storage temperature - max	80 °C
Climatic proofing	Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78
Ferminal capacities	
Terminal capacity (flexible with ferrule)	$2 \times (0.75 - 2.5)$ mm <sup>2</sup> , Screw terminals $1 \times (0.75 - 2.5)$ mm <sup>2</sup> , Screw terminals
Terminal capacity (solid)	$1 \times (0.75 - 4) \text{ mm}^2$ , Screw terminals $2 \times (0.75 - 2.5) \text{ mm}^2$ , Screw terminals
Terminal capacity (solid/stranded AWG)	18 - 14, Screw terminals
Stripping length (main cable)	10 mm
Screw size	M3.5, Terminal screw
Screwdriver size	0.8 x 5.5/1 x 6 mm, Terminal screw, Standard screwdriver 2, Terminal screw, Pozidriv screwdriver
Tightening torque	1.2 Nm, Screw terminals
lectrical rating	
Conventional thermal current ith at 60°C (3-pole, open)	16 A
Rated operational current (Ie)	6 A at 60 V, DC L/R ≤ 15 ms (with 1 contact in series) 6 A at 110 V, DC L/R ≤ 15 ms (with 3 contacts in series) 5 A at 220 V, DC L/R ≤ 15 ms (with 3 contacts in series) 10 A at 60 V, DC L/R ≤ 15 ms (with 2 contacts in series) 2 A at 110 V, DC L/R ≤ 50 ms (with 3 contacts in series) 10 A at 24 V, DC L/R ≤ 15 ms (with 1 contact in series) 4 A at 60 V, DC L/R ≤ 50 ms (with 3 contacts in series) 3 A at 110 V, DC L/R ≤ 50 ms (with 3 contacts in series) 1 A at 220 V, DC L/R ≤ 15 ms (with 1 contact in series) 4 A at 24 V, DC L/R ≤ 50 ms (with 3 contacts in series) 1 A at 220 V, DC L/R ≤ 50 ms (with 3 contacts in series) 1 A at 220 V, DC L/R ≤ 50 ms (with 3 contacts in series) 1 A at 220 V, DC L/R ≤ 50 ms (with 3 contacts in series)
Rated operational current (Ie) at AC-15, 220 V, 230 V, 240 V	4 A
Rated operational current (Ie) at AC-15, 380 V, 400 V, 415 V	4 A
Rated operational current (Ie) at AC-15, 500 V	1.5 A
Rated insulation voltage (Ui)	690 V
Rated operational voltage (Ue) at AC - max	690 V
Short-circuit protection rating without welding	10 A gG/gL, 500 V, Max. Fuse, Contacts
Safe isolation	400 V AC, Between auxiliary contacts, According to EN 61140 400 V AC, Between coil and auxiliary contacts, According to EN 61140
Switching capacity (auxiliary contacts, general use)	1 A, 250 V DC, (UL/CSA) 15 A, 600 V AC, (UL/CSA)
Switching capacity (auxiliary contacts, pilot duty)	A600, AC operated (UL/CSA) P300, DC operated (UL/CSA)
lagnet system	100 %
Duty factor  Disk was a base	100 %
Power consumption, pick-up, 50 Hz	0.8 - 1.1 V AC x Uc (voltage tolerance - single-voltage coil 50 Hz and dual-voltage coil 50 Hz, 60 Hz)  24 VA, AC, Single-frequency coil 50 Hz and Dual-frequency coil 50/60 Hz
Power consumption, pick-up, 30 Hz	24 VA, AC, Single-frequency coil 50 Hz and Dual-frequency coil 50/60 Hz
Power consumption, sealing, 50 Hz	1.4 W, AC, Single-frequency coil 50 Hz and Dual-frequency coil 50/60 Hz 3.4 VA, AC, Single-frequency coil 50 Hz and Dual-frequency coil 50/60 Hz
Power consumption, sealing, 60 Hz	1.4 W, AC, Single-frequency coil 50 Hz and Dual-frequency coil 50/60 Hz
Rated control supply voltage (Us) at AC, 50 Hz - min	24 V
Rated control supply voltage (Us) at AC, 50 Hz - max	24 V
Rated control supply voltage (Us) at AC, 60 Hz - min	0 V
Rated control supply voltage (Us) at AC, 60 Hz - max	0 V
Rated control supply voltage (Us) at DC - min	0 V
Rated control supply voltage (Us) at DC - max	0 V
Switching time (AC operated, make contacts, closing delay) - min	15 ms
Switching time (AC operated, make contacts, closing delay) - max	21 ms
Switching time (AC operated, make contacts, opening delay) - min	9 ms
Switching time (AC operated, make contacts, opening delay) - max	18 ms
Communication	

Control circuit reliability  A > 5 x 10-7 (I failure et 2,000,000 operations for U# = 24 V DC, Umin = 17 V, Imin = m x 10-7 (I failure et 2,000,000 operations for U# = 24 V DC, Umin = 17 V, Imin = m x 10-7 (I failure et 2,000,000 operations for U# = 24 V DC, Umin = 17 V, Imin = m x 10-7 (I failure et 2,000,000 operations for U# = 24 V DC, Umin = 17 V, Imin = m x 10-7 (I failure et 2,000,000 operations for U# = 24 V DC, Umin = 17 V, Imin = m x 10-7 (I failure et 2,000,000 operations for U# = 24 V DC, Umin = 17 V, Imin = m x 10-7 (I failure et 2,000,000 operations for U# = 24 V DC, Umin = 17 V, Imin = m x 10-7 (I failure et 2,000,000 operations for U# = 24 V DC, Umin = 17 V, Imin = m x 10-7 (I failure et 2,000,000 operations for U# = 24 V DC, Umin = 17 V, Imin = m x 10-7 (I failure et 2,000,000 operations for U# = 24 V DC, Umin = 17 V, Imin = m x 10-7 (I failure et 2,000,000 operations for U# = 24 V DC, Umin = 17 V, Imin = m x 10-7 (I failure et 2,000,000 operations for U# = 24 V DC, Umin = 17 V, Imin = m x 10-7 (I failure et 2,000,000 operations for U# = 24 V DC, Umin = 17 V, Imin = m x 10-7 (I failure et 2,000,000 operations for U# = 24 V DC, Umin = 17 V, Imin = m x 10-7 (I failure et 2,000,000 operations for U# = 24 V DC, Umin = 17 V, Imin = m x 10-7 (I failure et 2,000,000 operations for U# = 24 V DC, Umin = 17 V, Imin = m x 10-7 (I failure et 2,000,000 operations for U# = 24 V DC, Umin = 17 V, Imin = m x 10-7 (I failure et 2,000,000 operations for U# = 24 V DC, Umin = 17 V, Imin = m x 10-7 (I failure et 2,000,000 operations for U# = 24 V DC, Umin = 17 V, Imin = m x 10-7 (I failure et 2,000,000 operations for U# = 24 V DC, Umin = 17 V, Imin = m x 10-7 (I failure et 2,000,000 operations for U# = 24 V DC, Umin = 17 V, Imin = m x 10-7 (I failure et 2,000,000 operations for U# = 24 V DC, Umin = 17 V, Imin = m x 10-7 (I failure et 2,000,000 operations for U# 24 V DC, Umin = 17 V, Imin = m x 10-7 (I failure et 2,000,000 operations for U# 24 V DC, Umin = 17 V, Imin = m x 10-7 (I failure et 2,000,000 operations for U	Connection	Screw terminals
Code number  Control circuit reliability  A c x 10-71 failure at 2,800,800 operations for U6 = 24 V DC, Umin = 17 V, Imin = n/A P	Connection to SmartWire-DT	No
Number of auxiliary contacts (change-over contacts)   0   0	Contacts	
Number of contacts (change-over contacts)  Number of contacts (normally closed contacts)  Number of contacts (normally open contacts)  Number of auxiliary contacts (normally open contacts)  Number of auxiliary contacts (normally open contacts)  Section verification  Equipment heat dissipation, current-dependent Pvid  Peat of dissipation capacity Pdiss  Heat dissipation capacity Pdiss  Number of auxiliary contacts (normally open contacts)  Equipment heat dissipation, current-dependent Pvid  Peat dissipation per pole, current-dependent Pvid  Peat dissipation capacity Pdiss  Number of auxiliary contacts (normally open contacts)  Statc heat dissipation, current-dependent Pvid  Peat dissipation (apacity Pdiss  Net of the product standard is requirements.  10.2.4 Nerification of thermal stability of enclosures  10.2.2 Corrosion resistance  10.2.3 Resistance of resistance of insulating materials to normal heat  10.2.3 Resistance to ultra-violet (IUV) radiation  10.2.5 Mechanical impact  10.2.5 Mechanical impact  10.2.5 Mechanical impact  10.2.6 Incorporation of assemblies  10.2.6 Incorporation of assemblies  10.3 Degree of protection of assemblies  10.4 Clearances and creepage distances  10.5 Protection against electric shock  10.6 Incorporation of switching devices and components  10.7 Internal electrical circuits and consections  10.8 Connections for redurnal conductors  10.9 Power-frequency electric strength  10.9 Internal electrical circuits and consections  10.9 Power-frequency electric strength  10.9 Internal electrical circuits and consections  10.9 Power-frequency electric strength  10.9 Internal electrical circuits and consections  10.9 Power-frequency electric strength  10.9 Internal electrical circuits and consections  10.9 Internal electric strength  10.9	Code number	31E
Number of contacts (normally closed contacts)  Number of auxiliary contacts (normally open contacts)  Number of auxiliary contacts (normally closed contacts)  Number of auxiliary contacts (normally closed contacts)  Design verification  Equipment heat dissipation, current-dependent Pvid  Neat dissipation capacity Pdiss  Heat dissipation per pole, current dependent Pvid  Nature of auxiliary contacts (normally open contacts)  Static heat dissipation, current-dependent Pvid  Nature of auxiliary contacts (normally open contacts)  Static heat dissipation, con-current-dependent Pvid  Nature of auxiliary of the static	Control circuit reliability	$\lambda$ < 5 x 10-7 (1 failure at 2,000,000 operations for U# = 24 V DC, Umin = 17 V, Imin = 5 mA)
Number of contacts (normally open contacts)  Number of auxiliary contacts (normally closed contacts)  Sesign verification  Equipment heat dissipation, current-dependent Pvid  Heat dissipation capacity Pdiss  Heat dissipation per pole, current-dependent Pvid  OV  Heat dissipation per pole, current-dependent Pvid  Static heat dissipation, non-current-dependent Pvid  1.4 W  10.2 2 Corrosion resistance  Meats the product standard's requirements.  10.2.3.1 Verification of thermal stability of enclosures  10.2.3.2 Verification of resistance of insulating materials to normal heat  10.2.3.2 Verification of resistance of insulating materials to normal heat  10.2.3.1 Resist, of insul. mat. to abnormal heat/fire by internal elect. effects  10.2.5 Lifting  10.2.6 Mechanical impact  10.2.6 Mechanical impact  10.2.7 Inscriptions  Meets the product standard's requirements.  10.3 Degree of protection of assemblies  10.4 Clearances and crepage distances  10.5 Protection against electric shock  10.6 Clearances and crepage distances  10.7 Instral electrical circuits and connections  10.8 Connections for external conductors  10.9 Foreign external conductors  10.9 Foreign external conductors  10.9 Inspect external conductors  10.1 Short-circuit rating  10.1 Short-circuit r	Number of auxiliary contacts (change-over contacts)	0
Number of auxiliary contacts (normally closed contacts)    Design verification	Number of contacts (normally closed contacts)	1
Design verification  Equipment heat dissipation, current-dependent Pvid  Heat dissipation, capacity Pdiss  OW  Rated operational current-dependent Pvid  Bated operational current for specified heat dissipation (In)  Static heat dissipation, non-current-dependent Pvid  Rated operational current for specified heat dissipation (In)  Static heat dissipation, non-current-dependent Pvs  1.4 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  10.2.3.3 Resists of insul. mat. to abnormal heat/fire by internal elect. effects  Meets the product standard's requirements.  10.2.4 Resistance to ultra-violat (UV) radiation  Moets the product standard's requirements.  10.2.5 Utring  Does not apply, since the entire switchgear needs to be evaluated.  10.2.5 Identical impact  Does not apply, since the entire switchgear needs to be evaluated.  10.2.6 Rectances and creepage distances  Meets the product standard's requirements.  10.3 Degree of protection of assamblies  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.  10.5 Internal electrical circuits and connections  Is the panel builder's responsibility.  10.5 Connections for external conductors  Is the panel builder's responsibility.  10.5 Protection spin switchgear needs to be evaluated.  10.6 Internal electrical circuits and connections  Is the panel builder's responsibility.  10.7 Internal electrical circuits and connections  Is the panel builder's responsibility.  10.8 Penale builder's responsibility.  10.9 Protection against electric accordance of insulating material  10.9 Protection spin switchgear needs to be evaluated.  10.11 Short-circuit rating  10.12 Electromagneti	Number of contacts (normally open contacts)	3
Equipment heat dissipation, current-dependent Pvid 0W Heat dissipation capacity Pdiss 0W Heat dissipation capacity Pdiss 0W Heat dissipation per poly, current-dependent Pvid 0.5 W Rated operational current for specified heat dissipation (In) 15.5 A Static heat dissipation, non-current-dependent Pvid 0.5 W 1.4 W 10.2.2 Corrosion resistance Meets the product standard's requirements. 10.2.3 I Verification of thermal stability of enclosures Meets the product standard's requirements. 10.2.3.1 Verification of resistance of insulating materials to normal heat 10.2.3 Verification of resistance of unauting materials to normal heat 10.2.3 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 10.8 Connections for external conductors 10.9 Protection against electric shock 10.9 Protection against electric strength 10.9 Protection of external conductors 10.9 Protection of external conductors 10.9 Protection of external conductors 10.1 Internal electrical circuits and connections 10.2 Connections for external conductors 10.3 Internal electric accordance and components 10.4 Protection against electric strength 10.5 the panel builder's responsibility. 10.6 Protection against electric stre	Number of auxiliary contacts (normally closed contacts)	1
Equipment heat dissipation, current-dependent Pvid  Heat dissipation capacity Pdiss  0 W  Rated operational current for specified heat dissipation (In)  Static heat dissipation, non-current-dependent Pvid  15.5 A  Static heat dissipation, non-current-dependent Pvs  1.4 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  10.2.3.3 Resist. of insul. mat. to abnormal heat/fire by internal elect. effects  Meets the product standard's requirements.  10.2.5 Liffing  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.  Meets the product standard's requirements.  Meets the product standard's requirements.  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.  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.  Does not apply, since the entire switchgear needs to be evaluated.  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  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.  10.9.4 Testing of enclosures made of insulating material  10.10 Temperature rise  The panel builder's responsibility.  10.10 Temperature rise  10.11 Short-circuit rating  Is the panel builder's responsibility.  10.12 Electromagnetic compatibility  10.13 Mechanical	Number of auxiliary contacts (normally open contacts)	3
Heat dissipation capacity Pdiss  Heat dissipation per pole, current-dependent Pvid  Rated operational current for specified heat dissipation (In)  Static heat dissipation, non-current-dependent Pvs  1.4 W  10.22 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 Resists. 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 Machanical impact  Does not apply, since the entire switchgear needs to be evaluated.  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.  10.9 2 Power-frequency electric strength  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  10.11 Short-circuit rating  Lectromagnetic compatibility  10.12 Electromagnetic compatibility  Lectromagnetic compatibility  Lectromagnetic compatibility  Lectromagnetic compatibility  Lether panel builder's responsibility. The specifications for the switchgear must to observed.  10.13 Mechanical function  The devices meets the requirements, provided the information in the ins	Design verification	
Heat dissipation per pole, current-dependent Pvid  Rated operational current for specified heat dissipation (in)  Static heat dissipation, non-current-dependent Pvs  1.4 W  10.22 Corrosion resistance  Meets the product standard's requirements.  Meets the product standard's requirements.  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  10.2.3.3 Resistance to ultra-violet (UV) radiation  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.  10.2.7 Inscriptions  Meets the product standard's requirements.  10.3 Degree of protection of assemblies  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  Meets the product standard's requirements.  10.7 Internal electrical circuits and connections  Is the panel builder's responsibility.  10.9 Power-frequency electric strength  10.9.4 Testing of enclosures made of insulating material  10.9.4 Testing of enclosures made of insulating material  10.10 Temperature rise  The panel builder's responsibility.  10.10 Temperature rise  The panel builder's responsibility.  10.11 Short-circuit rating  10.13 Mechanical function  The device meets the requirements, provided the information in the instruction  The device meets the requirements, provided the information in the instruction	Equipment heat dissipation, current-dependent Pvid	0 W
Rated operational current for specified heat dissipation (In)  Static heat dissipation, non-current-dependent Pvs  1.4 W  10.22 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  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 (IV) radiation  10.2.5 Lifting  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 Frotection against electric shock  Does not apply, since the entire switchgear needs to be evaluated.  10.6 Incorporation of switching devices and components  10.7 Internal electrical circuits and connections  10.8 Connections for external conductors  10.9 Power-frequency electric strength  10.9 Conver-frequency electric strength  10.9 Is the panel builder's responsibility.  10.9.4 Testing of enclosures made of insulating material  10.10 Temperature rise  The panel builder's responsibility.  10.11 Short-circuit rating  Is the panel builder's responsibility.  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	Heat dissipation capacity Pdiss	0 W
Static heat dissipation, non-current-dependent Pvs  1.4.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.  10.2.3.3 Resist. of insul. mat. to abnormal heat  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.  10.2.7 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  10.6 Incorporation of switching devices and components  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.  10.9.4 Testing of enclosures made of insulating material  10.10 Temperature rise  The panel builder's responsibility.  10.11 Short-circuit rating  Is the panel builder's responsibility.  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	Heat dissipation per pole, current-dependent Pvid	0.5 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  10.2.3.3 Resists 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.  10.2.7 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  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.  10.9.4 Testing of enclosures made of insulating material  10.10 Temperature rise  The panel builder's responsibility.  10.10 Temperature rise  The panel builder's responsibility. The specifications for the switchgear must to observed.  10.11 Short-circuit rating  10.12 Electromagnetic compatibility  Is the panel builder's responsibility. The specifications for the switchgear must to observed.  10.13 Mechanical function  The device meets the requirements, provided the information in the instruction	Rated operational current for specified heat dissipation (In)	15.5 A
10.2.3.1 Verification of thermal stability of enclosures 10.2.3.2 Verification of resistance of insulating materials to normal heat 10.2.3.3 Resist. of insul. mat. to abnormal heat/fire by internal elect. effects 10.2.4 Resistance to ultra-violet (UV) radiation 10.2.5 Lifting 10.2.5 Lifting 10.2.5 Lifting 10.2.6 Mechanical impact 10.2.7 Inscriptions 10.3 Does not apply, since the entire switchgear needs to be evaluated. 10.2.7 Inscriptions 10.4 Clearances and creepage distances 10.5 Protection against electric shock 10.6 Incorporation of switching devices and components 10.7 Internal electrical circuits and connections 10.8 Connections for external conductors 10.9 Power-frequency electric strength 10.9.2 Power-frequency electric strength 10.9.4 Testing of enclosures made of insulating material 10.10 Temperature rise 10.11 Short-circuit rating 10.12 Electromagnetic compatibility 10.13 Mechanical function 10.13 Mechanical function 10.13 Mechanical function 10.14 Medianical function 10.15 Meets the product standard's requirements. 10.6 Incorporation of switching devices and components 10.7 Internal electrical circuits and connections 10.8 Connections for external conductors 10.9 Power-frequency electric strength 10.9 Power-frequency electric strength 10.10 Temperature rise 10.11 Short-circuit rating 10.12 Electromagnetic compatibility 10.13 Mechanical function 10.14 Mechanical function 10.15 Mechanical function 10.16 Meets the product standard's requirements. 10.17 Meets entire switchgear must be observed. 10.18 Mechanical function 10.19 Temperature rise product standard's requirements. 10.10 Temperature rise 10.11 Short-circuit rating 10.12 Electromagnetic compatibility 10.13 Mechanical function	Static heat dissipation, non-current-dependent Pvs	1.4 W
10.2.3.2 Verification of resistance of insulating materials to normal heat  10.2.3.3 Resist. of insul. mat. to abnormal heat/fire by internal elect. effects  10.2.4 Resistance to ultra-violet (UV) radiation  10.2.5 Lifting  10.2.6 Mechanical impact  10.2.7 Inscriptions  10.3 Degree of protection of assemblies  10.4 Clearances and creepage distances  10.5 Protection against electric shock  10.6 Incorporation of switching devices and components  10.7 Internal electrical circuits and connections  10.8 Connections for external conductors  10.9.2 Power-frequency electric strength  10.9.3 Impulse writhstand voltage  10.9.4 Testing of enclosures made of insulating material  10.10 Temperature rise  10.11 Short-circuit rating  10.12 Electromagnetic compatibility  10.13 Mechanical function  Meets the product standard's requirements.  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.  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.  10.8 Connections for external conductors  10.9 Evaluate the product standard's requirements.  10.9 Protection against electric switchgear needs to be evaluated.  10.10 Temperature rise  10.11 Short-circuit rating  10.12 Electromagnetic compatibility  10.13 Mechanical function  The device meets the requirements, provided the information in the instruction	10.2.2 Corrosion resistance	Meets the product standard's requirements.
10.2.33 Resist. of insul. mat. to abnormal heat/fire by internal elect. effects  10.24 Resistance to ultra-violet (UV) radiation  10.25 Lifting  10.26 Mechanical impact  10.27 Inscriptions  10.3 Degree of protection of assemblies  10.4 Clearances and creepage distances  10.5 Protection against electric shock  10.6 Incorporation of switching devices and components  10.7 Internal electrical circuits and connections  10.8 Connections for external conductors  10.9.2 Power-frequency electric strength  10.9.3 Impulse withstand voltage  10.10 Temperature rise  10.10 Temperature rise  10.11 Short-circuit rating  10.12 Electromagnetic compatibility  10.13 Mechanical function  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.  Is the panel builder's responsibility.  Is the panel builder's responsibility.  Is the panel builder is responsibility.  Is the panel builder's responsibility. The specifications for the switchgear must be observed.  Is the panel builder's responsibility. The specifications for the switchgear must be observed.	10.2.3.1 Verification of thermal stability of enclosures	Meets the product standard's requirements.
10.24 Resistance to ultra-violet (UV) radiation  Meets the product standard's requirements.  10.25 Lifting  Does not apply, since the entire switchgear needs to be evaluated.  10.26 Mechanical impact  Does not apply, since the entire switchgear needs to be evaluated.  10.27 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.  10.9.2 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  10.10 Temperature rise  The panel builder's responsibility. The specifications for the switchgear must be observed.  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	10.2.3.2 Verification of resistance of insulating materials to normal heat	Meets the product standard's requirements.
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10.27 Inscriptions  10.3 Degree of protection of assemblies  10.4 Clearances and creepage distances  10.5 Protection against electric shock  10.6 Incorporation of switching devices and components  10.7 Internal electrical circuits and connections  10.8 Connections for external conductors  10.9.2 Power-frequency electric strength  10.9.3 Impulse withstand voltage  10.10 Temperature rise  10.10 Temperature rise  10.11 Short-circuit rating  10.12 Electromagnetic compatibility  10.13 Mechanical function  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.  Is the panel builder's responsibility.  In panel builder's responsibility. The specifications for the switchgear must be observed.  In the panel builder's responsibility. The specifications for the switchgear must be observed.	10.2.5 Lifting	Does not apply, since the entire switchgear needs to be evaluated.
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	10.12 Electromagnetic compatibility	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
	10.13 Mechanical function	, ,,

## **Technical data ETIM 9.0**

Low-voltage industrial components (EG000017) / Contactor relay (EC000196)				
Electric engineering, automation, process control engineering / Low-voltage switch technology / Contactor (LV) / Contactor relay (ecl@ss13-27-37-10-01 [AAB716019])				
Rated control supply voltage AC 50 Hz	V	24 - 24		
Rated control supply voltage AC 60 Hz	V	0 - 0		
Rated control supply voltage DC	V	0 - 0		
Voltage type for actuating		AC		
Rated operation current	А	16		
Rated operation current le, 400 V	А	4		
Mounting method		Screw		
With LED indication		No		
Suitable for manual operation		No		
Interface		No		
Number of auxiliary contacts as normally closed contact		1		

Number of auxiliary contacts as normally open contact		3
Number of auxiliary contacts as normally closed contact, delayed switching		0
Number of auxiliary contacts as normally open contact, leading		0
Number of auxiliary contacts as change-over contact		0
Operating voltage AC 50 Hz	V	17 - 500
Operating voltage AC 60 Hz	V	17 - 500
Operating voltage DC	V	24 - 220
Voltage type (operating voltage)		AC/DC
Rated switch current	Α	16
Connection type auxiliary circuit		Screw connection
Width	mm	45
Height	mm	68
Depth	mm	75