

Auxiliary contact, 2early N/O, operates as an early-make contact

Part no. **NZM2/3-XHIV**
 Article no. **259430**



Technical data

Auxiliary contacts

Rated operational voltage	U_e	V																																																																														
Rated operational voltage	U_e	V AC	500																																																																													
Rated operational voltage, max.	U_e	V DC	220																																																																													
Conventional thermal current	$I_{th} = I_e$	CSA	4																																																																													
Rated operational current	I_e	A																																																																														
Different rated operational currents when used as auxiliary contact for NZM circuit-breaker																																																																																
			<table border="1"> <thead> <tr> <th></th> <th></th> <th></th> <th>bei AC = 50/60 Hz</th> <th>M22-K...</th> <th>M22-CK...</th> <th>XHIV</th> </tr> </thead> <tbody> <tr> <td>Bemessungsbetriebsstrom</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>AC-15</td> <td>15 V</td> <td>I_e</td> <td>A</td> <td>4</td> <td>4</td> <td>4</td> </tr> <tr> <td>230 V</td> <td>I_e</td> <td>A</td> <td></td> <td>4</td> <td>4</td> <td>4</td> </tr> <tr> <td>400 V</td> <td>I_e</td> <td>A</td> <td></td> <td>2</td> <td>-</td> <td>2</td> </tr> <tr> <td>500 V</td> <td>I_e</td> <td>A</td> <td></td> <td>1</td> <td>-</td> <td>1</td> </tr> <tr> <td>DC-13</td> <td>13 V</td> <td>I_e</td> <td>A</td> <td>3</td> <td>3</td> <td>3</td> </tr> <tr> <td>42 V</td> <td>I_e</td> <td>A</td> <td></td> <td>1.7</td> <td>1</td> <td>1.5</td> </tr> <tr> <td>60 V</td> <td>I_e</td> <td>A</td> <td></td> <td>1.2</td> <td>0.8</td> <td>0.8</td> </tr> <tr> <td>110 V</td> <td>I_e</td> <td>A</td> <td></td> <td>0.8</td> <td>0.5</td> <td>0.5</td> </tr> <tr> <td>220 V</td> <td>I_e</td> <td>A</td> <td></td> <td>0.3</td> <td>0.2</td> <td>0.2</td> </tr> </tbody> </table>				bei AC = 50/60 Hz	M22-K...	M22-CK...	XHIV	Bemessungsbetriebsstrom							AC-15	15 V	I_e	A	4	4	4	230 V	I_e	A		4	4	4	400 V	I_e	A		2	-	2	500 V	I_e	A		1	-	1	DC-13	13 V	I_e	A	3	3	3	42 V	I_e	A		1.7	1	1.5	60 V	I_e	A		1.2	0.8	0.8	110 V	I_e	A		0.8	0.5	0.5	220 V	I_e	A		0.3	0.2	0.2
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Short-circuit protection																																																																																
max. fuse		A gG/gL	10																																																																													
Max. miniature circuit-breaker		A	FAZ-B6																																																																													
Operating times			<p>Early-make time of the HIV compared to the main contacts during with make and break switching.</p> <p>(switch times with manual operation):</p> <p>NZM1, PN1, N(S)1: ca. 20 ms</p> <p>NZM2, PN2, N(S)2: ca. 20 ms</p> <p>NZM3, PN3, N(S)3: ca. 20 ms</p> <p>NZM4, N(S)4: approx. 90 ms, the HIV switch early Offswitching not forward.</p>																																																																													
Terminal capacities		mm ²																																																																														
Solid or flexible conductor, with ferrule		mm ²	1 x (0,75 - 2,5) 2 x (0,75 - 2,5)																																																																													
		AWG	1 x (18 - 14) 2 x (18 - 14)																																																																													
UL/CSA																																																																																
Rated operational current	I_e	A	2.5 A - 240 V AC 1 A - 250 V DC																																																																													
Heavy Pilot Duty			C300/R300																																																																													
Other technical data (sheet catalogue)			Maximum equipment and position of the internal accessories Time differences ON-OFF																																																																													

Design verification as per IEC/EN 61439

IEC/EN 61439 design verification		
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10.2 Strength of materials and parts		
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 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric 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 Insulation properties		
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 6.0

Low-voltage industrial components (EG000017) / Auxiliary contact block (EC000041)		
Electric engineering, automation, process control engineering / Low-voltage switch technology / Component for low-voltage switching technology / Auxiliary switch block (ecl@ss8.1-27-37-13-02 [AKN342010])		
Number of contacts as change-over contact		0
Number of contacts as normally open contact		2
Number of contacts as normally closed contact		0
Rated operation current I _e at AC-15, 230 V	A	4
Type of electric connection		Screw connection
Model		Half-integrated
Mounting method		-

Approvals

Product Standards		UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking
UL File No.		E140305
UL Category Control No.		DIHS
CSA File No.		022086
CSA Class No.		1437-01
North America Certification		UL listed, CSA certified

Additional product information (links)

IL01208005Z (AWA1230-1915) Shunt release, Undervoltage release, Early-make auxiliary contact		
IL01208005Z (AWA1230-1915) Shunt release, Undervoltage release, Early-make auxiliary contact	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL01208005Z2011_08.pdf	
Maximum equipment and position of the internal accessories	http://ecat.moeller.net/flip-cat/?edition=HPLEN&startpage=17.178	
Time differences ON-OFF	http://ecat.moeller.net/flip-cat/?edition=HPLEN&startpage=17.178	