## **SIEMENS**

## Data sheet

## 3RA2336-8XB30-1AG2



REVERSING COMB., AC3:22KW/400V, 110V AC 50/60HZ, 3-POLE, SIZE S2 SCREW CONNECTION ELECTR. AND MECH. INTERLOCK 2NO INTEGR.

Figure similar		
product brand name	-	SIRIUS
Product designation		reversing contactor assembly 3RA23
Manufacturer article number	_	
<ul> <li>1 of the supplied contactor</li> </ul>		3RT2036-1AG20
<ul> <li>2 of the supplied contactor</li> </ul>		3RT2036-1AG20
<ul> <li>of the supplied RS assembly kit</li> </ul>		<u>3RA2934-2BB1</u>
General technical data:		
Insulation voltage		
<ul> <li>with degree of pollution 3 Rated value</li> </ul>	V	690
Degree of pollution		3

Surge voltage resistance Rated value	kV	6
Mechanical service life (switching cycles)		
<ul> <li>of the contactor typical</li> </ul>		10 000 000
<ul> <li>of the contactor with added auxiliary switch block typical</li> </ul>		10 000 000
Protection class IP		
• on the front		IP20
Equipment marking		
• acc. to DIN EN 81346-2		Q
Main circuit:		
Number of poles for main current circuit		3

		5
Number of NC contacts for main contacts		0
Number of NO contacts for main contacts		3
Operating voltage		
• at AC-3 Rated value maximum	V	690

• at AC-1·- at 400 V at ambient temperature 40 °CA60Rated valueA55- at 400 V at ambient temperature 60 °CA55Rated valueA50• at AC-3-410- at 400 V Rated valueA50• at AC-3-411- at 400 V Rated valueA55- at 400 V Rated valueA55- at 24 V Rated valueA4.5• at DC-1 at 24 V Rated valueA35- at 110 V Rated valueA2.5- at 24 V Rated valueA2.5- at 24 V Rated valueA55- at 110 V Rated valueA55- at 24 V Rated valueA55- at 110 V Rated valueA55- at 100	Operating current	_	
at 400 V at ambient temperature 40 °C Rated valueA60 at 400 V at ambient temperature 60 °C Rated valueA55 at 400 V Rated valueA50- at AC-2 at 400 V Rated valueA40- at 400 V Rated valueA41- at 400 V Rated valueA41- at 400 V Rated valueA55- at 400 V Rated valueA55- at 24 V Rated valueA35- at 24 V Rated valueA35- at 24 V Rated valueA35- at 10 V Rated valueA55- at 10 V Rated valueA55- at 24 V Rated valueA55- at 24 V Rated valueA55- at 24 V Rated valueA55- at 10 V Rated valueA55- at 10 V Rated valueA55- at 24 V Rated valueA55- at 10 V Rated valueA55- at 10 V Rated valueA55- at 10 V Rated valueA55- at 24 V Rated valueA55- at 10 V Rated valueA55- at 10 V Rated valueA55- at 24 V Rated valueA55- at 10 V Rated valueKW22- at 40 V Rated value <td></td> <td></td> <td></td>			
Rated valueA at 400 V at ambient temperature 60 °C Rated valueA at 400 V Rated valueA• at AC-3 (		А	60
Rated valueA50• at AC-2 at 400 V Rated valueA50• at AC-3A41— at 400 V Rated valueA41Operating current with 1 current pathA55• at DC-1 at 24 V Rated valueA55- at 110 V Rated valueA35- at 24 V Rated valueA35- at 24 V Rated valueA35- at 24 V Rated valueA55- at 24 V Rated valueA25Operating current with 2 current paths in series at 24 V Rated valueA55- at 110 V Rated valueA25Operating current with 3 current paths in series at 110 V Rated valueA55- at 24 V Rated valueA55- at 110 V Rated valueA55- at 110 V Rated valueA55- at 24 V Rated valueA55- at 24 V Rated valueA55- at 110 V Rated valueA55- at 110 V Rated valueA55- at 24 V Rate			
at AC-2 at 400 V Rated valueA50- at 400 V Rated valueA50- at AC-4 at 400 V Rated valueA41Operating current with 1 current pathF- at 24 V Rated valueA55- at 24 V Rated valueA35- at 10 V Rated valueA35- at 24 V Rated valueA55- at 110 V Rated valueA55- at 100 V Rated valueA55- at 100 V Rated valueA55- at 400 V Rated valueA55- at 400 V Rated valueKW22Operating power at 600 V Ra	— at 400 V at ambient temperature 60 °C	А	55
at AC-3 - at 400 V Rated value at AC-4 at 400 V Rated value A 50 - at AC-4 at 400 V Rated value A 41 Operating current with 1 current path - at 24 V Rated value - at 24 V Rated value - at 110 V Rated value - at 24 V Rated value - at 400 V Rated value - at 600 V Rated value - at	Rated value		
	• at AC-2 at 400 V Rated value	А	50
Lart Not Nated valueA41Operating current with 1 current path • at DC-1A55- at 24 V Rated valueA55- at 10 V Rated valueA35- at 10 V Rated valueA2.5Operating current with 2 current paths in seriesA55- at 24 V Rated valueA2.5Operating current with 2 current paths in seriesA25- at 24 V Rated valueA25- at 24 V Rated valueA55- at 24 V Rated valueA55- at 10 V Rated valueA55- at 10 V Rated valueA55- at 24 V Rated valueA55- at 10 V Rated valueA55- at 10 V Rated valueA55- at 10 V Rated valueA55- at 24 V Rated valueA55- at 10 V Rated valueA55- at 400 V Rated valueA55- at 400 V Rated valueKW22• at AC-3 - at 400 V Rated valueKW22- at 400 V Rated valueKW22	• at AC-3		
Control Value ValueA55- at 24 V Rated valueA4.5- at 10 V Rated valueA4.5- at 10 V Rated valueA35- at 24 V Rated valueA2.5- at 24 V Rated valueA55- at 10 V Rated valueA2.5Operating current with 2 current paths in series at 10 V Rated valueA55- at 24 V Rated valueA55- at 10 V Rated valueA55- at 10 V Rated valueA55- at 24 V Rated valueA55- at 24 V Rated valueA55- at 10 V Rated valueA55- at 10 V Rated valueA55- at 10 V Rated valueA55- at 24 V Rated valueA55- at 400 V Rated valueA55- at 400 V Rated valueKW22Operating power- at 400 V Rated valueKW22- at 400 V Rated valueKW22- at 400 V Rated valueKW22 <td< td=""><td>— at 400 V Rated value</td><td>А</td><td>50</td></td<>	— at 400 V Rated value	А	50
• at DC-1II- at 24 V Rated valueA55- at 110 V Rated valueA4.5• at DC-3 at DC-5 at 24 V Rated valueA35- at 10 V Rated valueA2.5• at DC-1 at 24 V Rated valueA55- at 110 V Rated valueA25• at DC-3 at 10 V Rated valueA55- at 24 V Rated valueA55- at 24 V Rated valueA55- at 10 V Rated valueA55- at 24 V Rated valueA55- at 10 V Rated valueA55- at 110 V Rated valueKW22- at 400 V Rated valueKW <td>• at AC-4 at 400 V Rated value</td> <td>А</td> <td>41</td>	• at AC-4 at 400 V Rated value	А	41
-at 24 V Rated valueA55-at 110 V Rated valueA4.5- at 24 V Rated valueA35- at 24 V Rated valueA2.5Operating current with 2 current paths in series at 24 V Rated valueA55- at 24 V Rated valueA25- at 10 V Rated valueA25- at 10 V Rated valueA25- at 110 V Rated valueA25- at 110 V Rated valueA55- at 110 V Rated valueA55- at 10 V Rated valueA55- at 24 V Rated valueA55- at 10 V Rated valueA55- at 10 V Rated valueA55- at 10 V Rated valueA55- at 24 V Rated valueA55- at 10 V Rated valueA55- at 24 V Rated valueA55- at 24 V Rated valueKW22- at 400 V Rated valueKW22- at 690 V Rated valueKW22- at 690 V Rated valueKW22- at 690 V Rated valueKW22- at 600 V Rated valueKW22- a	Operating current with 1 current path	_	
A 110 V Rated valueA4.5• at 10C3 at DC-5 at 24 V Rated valueA0 at 10 V Rated valueA2.5Operating current with 2 current paths in series-• at DC-1 at 24 V Rated valueA- at 24 V Rated valueA- at 10 V Rated valueA- at 24 V Rated valueA- at 10 V Rated valueA- at 400 V Rated valueKW- at 690 V Rated valueKW- at	● at DC-1		
• at DC-3 at DC-5A- at 24 V Rated valueA- at 110 V Rated valueA2.5Operating current with 2 current paths in series• at DC-1- at 24 V Rated valueA- at 24 V Rated valueA- at 110 V Rated valueA- at 24 V Rated valueA- at 110 V Rated valueA- at 24 V Rated valueA- at 110 V Rated valueA- at 110 V Rated valueA- at 24 V Rated valueA- at 400 V Rated valueA- at 400 V Rated valueKW- at 690 V Rated valueKW- at 690 V Rated valueKW- at 400 V Rated valueKW- at 400 V Rated valueKW- at 690 V Rated valueKW- at 400 V Rated valueKW- at 400 V Rated valueKW- at 690 V Rated value	— at 24 V Rated value	А	55
- at 24 V Rated valueA35- at 110 V Rated valueA2.5Operating current with 2 current paths in series • at DC-1 - at 24 V Rated valueA55- at 110 V Rated valueA25- at 110 V Rated valueA25- at 110 V Rated valueA55- at 110 V Rated valueA55- at 24 V Rated valueA55- at 10 V Rated valueA55- at 24 V Rated valueA55- at 110 V Rated valueA55- at 24 V Rated valueA55- at 110 V Rated valueA55- at 40 V Rated valueA55- at 40 V Rated valueKW22• at AC-3- at 400 V Rated valueKW- at 400 V Rated valueKW22• at AC-3- at 400 V Rated valueKW22• at 400 V Rated valueKW22• at 400 V Rated valueKW22• at 600 V Rated valueKW22• at AC-3 maximum1/h800	— at 110 V Rated value	А	4.5
A at 10 V Rated valueA2.5Operating current with 2 current paths in series	• at DC-3 at DC-5		
Contract with 2 current paths in seriesImage: Control of the series• at DC-1 at 24 V Rated valueA- at 110 V Rated valueA• at DC-3 at DC-5 at 110 V Rated valueA- at 110 V Rated valueA- at 24 V Rated valueA- at 110 V Rated valueA- at 24 V Rated valueA- at 110 V Rated valueA- at 110 V Rated valueA- at 24 V Rated valueA- at 10 V Rated valueA- at 40 V Rated valueA- at 40 V Rated valueKW22Operating power-• at AC-3 at 400 V Rated valueKW- at 690 V Rated valueKW- at 690 V Rated valueKW- at AC-3 maximum1/h	— at 24 V Rated value	А	35
• at DC-1Image: Constraint of the series of the	— at 110 V Rated value	А	2.5
- at 24 V Rated valueA55- at 110 V Rated valueA25• at DC-3 at DC-5 at 110 V Rated valueA25- at 24 V Rated valueA55Operating current with 3 current paths in series-• at DC-1 at 24 V Rated valueA55• at DC-1 at 24 V Rated valueA55• at DC-3 at 110 V Rated valueA55• at DC-3 at DC-5 at 110 V Rated valueA55• at 110 V Rated valueA55• at 110 V Rated valueA55• at AC-2 at 400 V Rated valueKW22• at AC-3• at AC-3 at 400 V Rated valueKW22• at AC-3 at 690 V Rated valueKW22• at AC-3 maximum1/h800	Operating current with 2 current paths in series		
- at 110 V Rated valueA25- at 10 V Rated valueA25- at 10 V Rated valueA25- at 24 V Rated valueA55Operating current with 3 current paths in series at 24 V Rated valueA55- at 24 V Rated valueA55- at 24 V Rated valueA55- at 110 V Rated valueA55- at 24 V Rated valueA55- at 24 V Rated valueA55- at 24 V Rated valueA55- at 40 V Rated valueKW22• at AC-2 at 400 V Rated valueKW22• at AC-3- at 400 V Rated valueKW22• at AC-3- at 690 V Rated valueKW22• at AC-3 maximum1/h800	● at DC-1		
• at DC-3 at DC-5 at 110 V Rated valueA- at 24 V Rated valueA55Operating current with 3 current paths in series• at DC-1- at 24 V Rated valueA- at 24 V Rated valueA- at 24 V Rated valueA- at 110 V Rated valueA- at 24 V Rated valueA- at 24 V Rated valueA- at 400 V Rated valueKW22Operating power-• at AC-2 at 400 V Rated valueKW• at AC-3 at 400 V Rated valueKW22Operating power-• at AC-3 at 400 V Rated valueKW22Operating frequencyKW- at 690 V Rated valueKW22Operating frequency-• at AC-3 maximum1/h800	— at 24 V Rated value	А	55
- at 110 V Rated valueA25- at 24 V Rated valueA55Operating current with 3 current paths in series at DC-155- at 24 V Rated valueA55- at 24 V Rated valueA55- at 110 V Rated valueA55- at 110 V Rated valueA55- at 24 V Rated valueA55- at 110 V Rated valueA55- at 24 V Rated valueA55- at 24 V Rated valueKW22- at AC-2 at 400 V Rated valueKW22• at AC-3 at 400 V Rated valueKW22- at 400 V Rated valueKW24 at 400 V Rated valueKW24 </td <td>— at 110 V Rated value</td> <td>А</td> <td>25</td>	— at 110 V Rated value	А	25
A Hole Hales halesA55Operating current with 3 current paths in series • at DC-1 at 24 V Rated valueA55- at 10 V Rated valueA55- at 110 V Rated valueA55- at 24 V Rated valueKW22Operating power at AC-2 at 400 V Rated valueKW22• at AC-3 at 400 V Rated valueKW22- at 400 V Rated valueKW22- at 690 V Rated valueKW22- at 690 V Rated valueKW22- at AC-3 maximum1/h800	• at DC-3 at DC-5		
Operating current with 3 current paths in series • at DC-1Image: constraint of the series • at DC-1 at 24 V Rated valueA55 at 110 V Rated valueA55• at DC-3 at DC-5	— at 110 V Rated value	А	25
• at DC-1II- at 24 V Rated valueA55- at 110 V Rated valueA55• at DC-3 at DC-5 at 110 V Rated valueA55- at 24 V Rated valueA55- at 24 V Rated valueA55Operating power-• at AC-2 at 400 V Rated valueKW22• at AC-4 at 400 V Rated valueKW22• at AC-3 at 400 V Rated valueKW22• at AC-3 at 690 V Rated valueKW22• at AC-3 maximumI/h800	— at 24 V Rated value	А	55
- at 24 V Rated valueA55- at 110 V Rated valueA55- at 10 V Rated valueA55- at 110 V Rated valueA55- at 24 V Rated valueA55- at 24 V Rated valueKW22Operating powerkW22• at AC-2 at 400 V Rated valuekW22• at AC-3 at 400 V Rated valuekW22• at AC-3- at 400 V Rated valuekW• at AC-3- at 400 V Rated valuekW• at AC-3- at 690 V Rated valuekW• at AC-3 maximum1/h800	Operating current with 3 current paths in series		
- at 110 V Rated valueA55- at 110 V Rated valueA55- at 110 V Rated valueA55- at 24 V Rated valueA55Operating power• at AC-2 at 400 V Rated valueKW22• at AC-2 at 400 V Rated valueKW22Operating power• at AC-3 at 400 V Rated valueKW22Operating power• at AC-3 at 400 V Rated valueKW22Operating frequencyKW22• at AC-3 maximumI/h800	● at DC-1		
• at DC-3 at DC-5II- at 110 V Rated valueA55- at 24 V Rated valueA55Operating power• at AC-2 at 400 V Rated valuekW22• at AC-4 at 400 V Rated valuekW22Operating power• at AC-3 at 400 V Rated valuekW22Operating power• at AC-3 at 400 V Rated valuekW22Operating frequencykW22• at AC-3 maximum1/h800	— at 24 V Rated value	А	55
- at 110 V Rated valueA55- at 24 V Rated valueA55Operating powerKW22• at AC-2 at 400 V Rated valuekW22• at AC-4 at 400 V Rated valuekW22• at AC-3- at 400 V Rated valueKW• at AC-3- at 400 V Rated valuekW• at AC-3kW22- at 400 V Rated valuekW22• at AC-3kW22• at AC-3 maximum1/h800	— at 110 V Rated value	А	55
- at 24 V Rated valueA55Operating power• at AC-2 at 400 V Rated valuekW22• at AC-4 at 400 V Rated valuekW22Operating power• at AC-3 at 400 V Rated valuekW22- at 400 V Rated valuekW22- at 690 V Rated valuekW22Operating frequency• at AC-3 maximum1/h800	• at DC-3 at DC-5		
Operating powerImage: state of the state of t	— at 110 V Rated value	А	55
• at AC-2 at 400 V Rated valuekW22• at AC-4 at 400 V Rated valuekW22Operating power• at AC-3 at 400 V Rated valuekW22- at 690 V Rated valuekW22Operating frequencykW22• at AC-3 maximum1/h800	— at 24 V Rated value	А	55
• at AC-4 at 400 V Rated valuekW22Operating power • at AC-3 - at 400 V Rated valuekW22- at 400 V Rated valuekW22- at 690 V Rated valuekW22Operating frequency • at AC-3 maximum1/h800	Operating power		
Operating powerii• at AC-3··- at 400 V Rated valuekW22- at 690 V Rated valuekW22Operating frequency··• at AC-3 maximum1/h800	• at AC-2 at 400 V Rated value	kW	22
• at AC-3KW22- at 400 V Rated valuekW22- at 690 V Rated valuekW22Operating frequency	• at AC-4 at 400 V Rated value	kW	22
at 400 V Rated valuekW22 at 690 V Rated valuekW22Operating frequency	Operating power		
at 690 V Rated valuekW22Operating frequency1/h800	• at AC-3		
Operating frequency     1/h     800	— at 400 V Rated value	kW	22
• at AC-3 maximum 1/h 800	— at 690 V Rated value	kW	22
	Operating frequency		
No-load switching frequency 1/h 1 500			
	No-load switching frequency	1/h	1 500

Control circuit/ Control:		
Type of voltage of the control supply voltage		AC
Control supply voltage 1 with AC		
• at 50 Hz Rated value	V	110
• at 60 Hz Rated value	V	110
Operating range factor control supply voltage rated		
value of the magnet coil with AC		
● at 50 Hz		0.8 1.1
• at 60 Hz		0.85 1.1
Auxiliary circuit:		
Number of NC contacts		
<ul> <li>for auxiliary contacts</li> </ul>		
- per direction of rotation		0
— instantaneous contact		0
— lagging switching		0
Number of NO contacts		
<ul> <li>for auxiliary contacts</li> </ul>		
- per direction of rotation		0
— instantaneous contact		0
— leading contact		0
Product expansion Auxiliary switch		Yes
Operating current of the auxiliary contacts at AC-12	А	10
maximum		
Operating current of the auxiliary contacts at AC-15		
• at 230 V	A	6
• at 400 V	A	3
Operating current of the auxiliary contacts at DC-13		
• at 24 V	A	10
• at 60 V	A	2
• at 110 V	A	1
• at 220 V	А	0.3
Contact reliability of the auxiliary contacts		< 1 error per 100 million operating cycles
UL/CSA ratings:		
Full-load current (FLA) for three-phase AC motor		
● at 480 V Rated value	А	52
• at 600 V Rated value	А	52
yielded mechanical performance [hp]		
<ul> <li>for single-phase AC motor at 110/120 V Rated value</li> </ul>	metric hp	3
<ul> <li>for single-phase AC motor at 230 V Rated value</li> </ul>	metric hp	7.5

<ul> <li>for three-phase AC motor at 220/230 V Rated value</li> </ul>	metric hp	15
• for three-phase AC motor at 460/480 V Rated	metric	40
value	hp	
<ul> <li>for three-phase AC motor at 575/600 V Rated</li> </ul>	metric	50
value	hp	
Contact rating of the auxiliary contacts acc. to UL	_	A600 / Q600
Short-circuit:		
Design of the fuse link		
<ul> <li>for short-circuit protection of the main circuit</li> </ul>		
— with type of assignment 1 required		gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 160 A
— with type of assignment 2 required		gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 80 A
<ul> <li>for short-circuit protection of the auxiliary switch</li> </ul>		fuse gL/gG: 10 A
required		
nstallation/ mounting/ dimensions:		
mounting position		+/-180° rotation possible on vertical mounting
		surface; can be tilted forward and backward by +/-
	_	22.5° on vertical mounting surface
Mounting type		screw and snap-on mounting onto 35 mm standard mounting rail
Height	mm	141
Width	mm	120
Depth	mm	130
Required spacing		
<ul> <li>with side-by-side mounting</li> </ul>		
— forwards	mm	10
— Backwards	mm	0
— upwards	mm	10
— downwards	mm	10
— at the side	mm	10
<ul> <li>for grounded parts</li> </ul>		
— forwards	mm	10
— Backwards	mm	0
— upwards	mm	10
— at the side	mm	10
— downwards	mm	10
• for live parts		
— forwards	mm	10
— Backwards	mm	0
Duoimai ao		
— upwards	mm	10
— upwards — downwards	mm mm	10
— upwards — downwards	mm mm	10 10

Connections/ Terminals: Type of electrical connection	-	
		acrow two terminals
• for main current circuit		screw-type terminals
for auxiliary and control current circuit	_	screw-type terminals
Type of connectable conductor cross-section		
for main contacts		
— single or multi-stranded		2x (1 35 mm²), 1x (1 50 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>		2x (1 25 mm²), 1x (1 35 mm²)
<ul> <li>for AWG conductors for main contacts</li> </ul>		2x (18 2), 1x (18 1)
<ul> <li>for auxiliary contacts</li> </ul>		
— single or multi-stranded		2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²)
— finely stranded with core end processing		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
<ul> <li>for AWG conductors for auxiliary contacts</li> </ul>		2x (20 16), 2x (18 14)
Apparent pick-up power of the magnet coil with AC	-	
● at 50 Hz	V·A	210
• at 60 Hz	V·A	188
Safety related data:		
B10 value with high demand rate acc. to SN 31920		1 000 000
Proportion of dangerous failures		
<ul> <li>with low demand rate acc. to SN 31920</li> </ul>	%	40
• with high demand rate acc. to SN 31920	%	73
Failure rate [FIT] with low demand rate acc. to SN	FIT	100
31920		
T1 value for proof test interval or service life acc. to IEC 61508	У	20
Protection against electrical shock		finger-safe when touched vertically from front acc. to IEC 60529
lechanical data:		
Size of contactor		S2
Communication/ Protocol:		
Product function Bus communication		No
Protocol is supported		

Product function Control circuit interface with IO link	NO	
Product function Control circuit interface with IO link	No	
AS-interface protocol	No	
Protocol is supported		

Installation altitude at height above sea level	m	2 000	
maximum			
Ambient temperature			
<ul> <li>during operation</li> </ul>	°C	-25 +60	
<ul> <li>during storage</li> </ul>	°C	-55 +80	

## General Product Approval Declaration of Conformity other Image: Conformity Image: Conformation of Conformatica of Conforma

EG-Konf.

Further information

Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/industrial-controls/catalogs

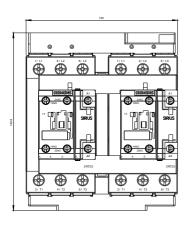
Industry Mall (Online ordering system) http://www.siemens.com/industrymall

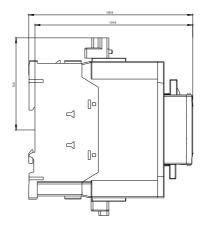
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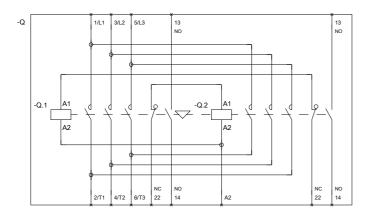
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA23368XB301AG2

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RA23368XB301AG2/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA23368XB301AG2&lang=en







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