

STAR-DELTA (WYE-D.) COMBINATION AC3:55KW/400V  
24-33V AC/DC SIZE S2,  
SCREW CONNECTION ELECTR. AND MECH. INTERLOCK  
3NO+3NC INTEGR.,



### General technical data:

product brand name		SIRIUS
Product function		wye-delta combination
Size of contactor		S2
Protection class IP / on the front		IP20
Degree of pollution		3
Insulation voltage / with degree of pollution 3 / Rated value	V	690
Installation altitude / at height above sea level / maximum	m	2,000
Ambient temperature / during storage	°C	-55 ... +80
Ambient temperature / during operation	°C	-25 ... +60
Surge voltage resistance / Rated value	kV	6
Active power loss / per conductor / typical	W	3.8
<b>Manufacturer article number</b> <ul style="list-style-type: none"> <li>• of the supplied function module for wye-delta circuits</li> <li>• 1 / of the supplied contactor</li> <li>• 2 / of the supplied contactor</li> <li>• 3 / of the supplied contactor</li> <li>• of the supplied RS assembly kit</li> </ul>		<a href="#">3RA2816-0EW20</a> <a href="#">3RT2037-1NB30</a> <a href="#">3RT2037-1NB30</a> <a href="#">3RT2035-1NB30</a> <a href="#">3RA2934-2BB1</a>
<b>Mechanical service life (switching cycles)</b> <ul style="list-style-type: none"> <li>• of the contactor / typical</li> </ul>		10,000,000

- of the contactor with added auxiliary switch block / typical

10,000,000

#### Communication/ Protocol:

##### Product function

- Bus communication
- Control circuit interface with IO link

No

No

##### Protocol / is supported / AS-interface protocol

No

#### Main circuit:

##### Number of poles / for main current circuit

3

##### 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

##### Operating current

- at AC-1 / at 400 V
  - at ambient temperature 40 °C / Rated value
  - at ambient temperature 60 °C / Rated value
- at AC-2 / at 400 V / Rated value
- at AC-3 / at 400 V / Rated value

A

80

A

70

A

115

A

115

##### Operating power

- at AC-2 / at 400 V / Rated value
- at AC-3
  - at 400 V / Rated value
- at AC-4 / at 400 V / Rated value

kW

55

kW

55

kW

48.5

##### No-load switching frequency

1/h

1,500

##### Operating frequency

- at AC-1 / maximum
- at AC-2 / maximum
- at AC-3 / maximum
- at AC-4 / maximum

1/h

800

1/h

400

1/h

700

1/h

200

#### Control circuit/ Control:

##### Type of voltage / of the control supply voltage

AC/DC

##### Control supply voltage / 1

- for DC
- with AC
  - at 50 Hz
- with AC
  - at 60 Hz

V

20 ... 33

V

20 ... 33

V

20 ... 33

##### Operating range factor control supply voltage rated value / of the magnet coil

• with AC / at 50 Hz		0.8 ... 1.1
• with AC / at 60 Hz		0.8 ... 1.1
• for DC		0.8 ... 1.1
<b>Apparent pick-up power / of the magnet coil / with AC</b>		
• at 50 Hz	V·A	40
• at 60 Hz	V·A	40
<b>Inductive power factor / with closing power of the coil</b>		
• at 50 Hz		0.64
• at 60 Hz		0.5
<b>Apparent holding power / of the magnet coil / with AC</b>		
• at 50 Hz	V·A	2
• at 60 Hz	V·A	2
<b>Inductive power factor / with the holding power of the coil</b>		
• at 50 Hz		0.36
• at 60 Hz		0.39
<b>Closing power / of the magnet coil / for DC</b>	W	23
<b>Holding power / of the magnet coil / for DC</b>	W	1

<b>Auxiliary circuit:</b>		
<b>Product expansion / Auxiliary switch</b>		No
<b>Contact reliability / of the auxiliary contacts</b>		< 1 error per 100 million operating cycles
<b>Number of NC contacts / for auxiliary contacts</b>		
• instantaneous contact		3
• lagging switching		0
<b>Number of NO contacts / for auxiliary contacts</b>		
• instantaneous contact		3
• leading contact		0
<b>Operating current / of the auxiliary contacts</b>		
• at AC-12 / maximum	A	10
• at AC-15		
• at 230 V	A	6
• at 400 V	A	3
• at DC-12		
• at 48 V	A	6
• at 60 V	A	6
• at 110 V	A	3
• at 220 V	A	1
• at DC-13		
• at 24 V	A	10
• at 48 V	A	2

- at 60 V
- at 110 V
- at 220 V

A	2
A	1
A	0.3

#### Short-circuit:

##### Design of the fuse link

- for short-circuit protection of the auxiliary switch / required

fuse gL/gG: 10 A

#### Installation/ 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 fixing

##### Width

mm 177.5

##### Height

mm 142

##### Depth

mm 223

#### Connections/ terminals:

##### Design of the electrical connection

- for main current circuit
- for auxiliary and control current circuit

screw-type terminals

screw-type terminals

##### Type of connectable conductor cross-section

- for main contacts
  - single or multi-stranded
  - finely stranded / with core end processing
- for AWG conductors / for main contacts

2x (1 ... 35 mm²), 1x (1 ... 50 mm²)

2x (1 ... 25 mm²), 1x (1 ... 35 mm²)

2x (18 ... 2), 1x (18 ... 1)

##### Type of connectable conductor cross-section

- for auxiliary contacts
  - single or multi-stranded
  - finely stranded / with core end processing
- for AWG conductors / for auxiliary contacts

2x (0,5 ... 1,5 mm²), 2x (0,75 ... 2,5 mm²)

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)

2x (20 ... 16), 2x (18 ... 14)

#### Certificates/ approvals:

##### Declaration of Conformity



#### UL/CSA ratings:

##### Contact rating / of the auxiliary contacts / acc. to UL

A600 / Q600

#### Safety related data:

##### B10 value / with high demand rate

• acc. to SN 31920		1,000,000
<b>Failure rate [FIT] / with low demand rate</b>		
• acc. to SN 31920	FIT	100
<b>Proportion of dangerous failures</b>		
• with low demand rate / acc. to SN 31920	%	40
• with high demand rate / acc. to SN 31920	%	73
<b>T1 value / for proof test interval or service life</b>		
• acc. to IEC 61508	a	20

#### Further information:

##### Information- and Downloadcenter (Catalogs, Brochures,...)

<http://www.siemens.com/industrial-controls/catalogs>

##### Industry Mall (Online ordering system)

<http://www.siemens.com/industrymall>

##### Cax online generator

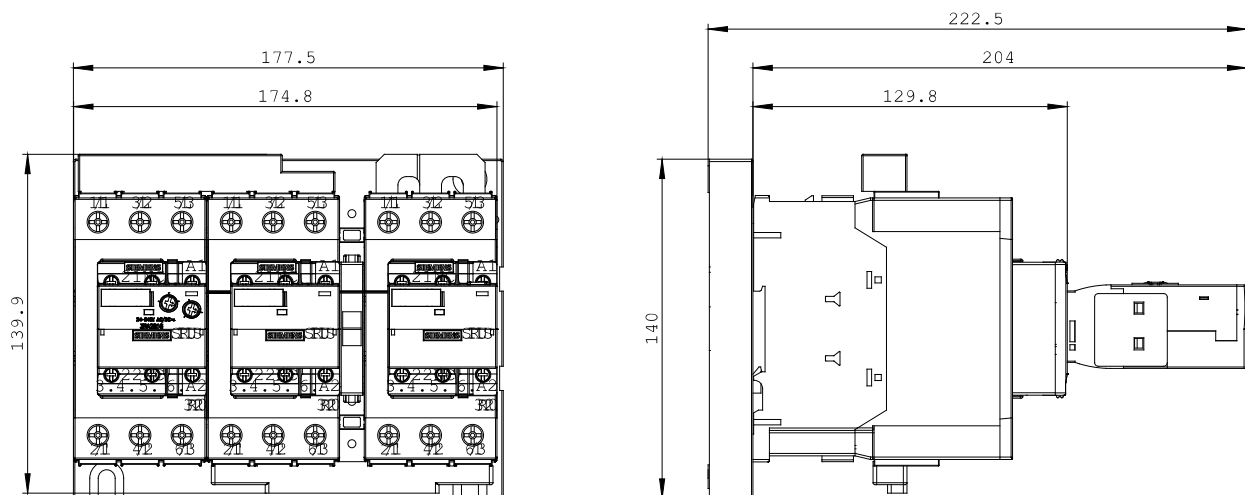
<http://www.siemens.com/cax>

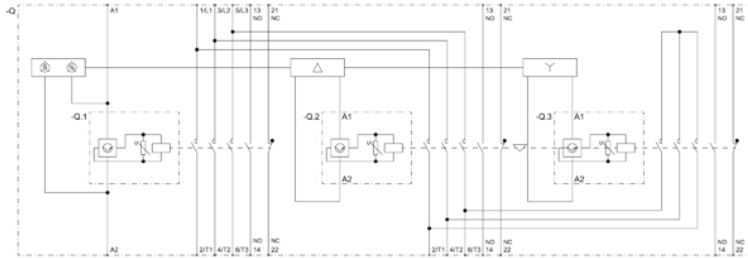
##### Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RA2437-8XF32-1NB3/all>

##### Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RA2437-8XF32-1NB3](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RA2437-8XF32-1NB3)





last change:

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