SIEMENS

Data sheet 3RF2230-1AB45



Semiconductor relay, 3-phase 3RF2 30 A / 40 $^{\circ}\text{C}$ 48-600 V / 4-30 V DC 2-phase controlled screw terminal Blocking voltage 1200 V

product brand name	SIRIUS
product designation	solid-state relay
design of the product	two-phase controlled
product type designation	3RF22
manufacturer's article number	
_2 of the accessories that can be ordered	3RF2900-0EA18
product designation	
_2 of the accessories that can be ordered	converter
General technical data	
product function	zero-point switching
power loss [W] for rated value of the current	
 at AC in hot operating state 	81 W
 at AC in hot operating state per pole 	81 W
 without load current share typical 	0.9 W
insulation voltage rated value	600 V
type of voltage	
 of the operating voltage 	AC
 of the control supply voltage 	DC
surge voltage resistance of main circuit rated value	6 kV
shock resistance according to IEC 60068-2-27	15g / 11 ms
vibration resistance according to IEC 60068-2-6	2g
reference code according to DIN 40719 extended according to IEC 204-2 according to IEC 750	К
reference code according to EN 61346-2	Q
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	07/01/2006
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8
Main circuit	
number of poles for main current circuit	3
number of NO contacts for main contacts	2
number of NC contacts for main contacts	0
type of voltage of the operating voltage	AC
operating voltage	
• at AC	
— at 50 Hz rated value	48 600 V
— at 60 Hz rated value	48 600 V
operating frequency rated value	50 60 Hz
relative symmetrical tolerance of the operating frequency	10 %
operating range relative to the operating voltage at AC	
● at 50 Hz	40 660 V

* at 60 Hz		
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height 95 mm width 45 mm depth 47 mm Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit screw-type terminals • for auxiliary and control circuit screw-type terminals • for main contacts — solid — finely stranded with core end processing • for AWG cables for main contacts • solid or stranded • finely stranded with core end processing • for auxiliary and control contacts • solid or stranded • finely stranded with core end processing • for auxiliary and control contacts — solid — finely stranded with core end processing • for auxiliary and control contacts — solid — finely stranded with core end processing • for auxiliary and control contacts — solid — finely stranded with core end processing • for auxiliary and control contacts — solid — finely stranded with core end processing • for auxiliary and control contacts — solid — finely stranded with core end processing • for auxiliary and control contacts — solid — finely stranded with core end processing 1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²)	fastening method design of the thread of the screw for securing the	screw fixing
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depth 47 mm Connections/ Terminals product component removable terminal for auxiliary and control circuit Yes type of electrical connection screw-type terminals • for main current circuit screw-type terminals • for auxiliary and control circuit screw-type terminals type of connectable conductor cross-sections 2x (1.5 2.5 mm²), 2x (2.5 6 mm²) — solid 2x (1.5 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² • for AWG cables for main contacts 2x (14 10) connectable conductor cross-section for main contacts 1.5 6 mm² • solid or stranded 1.5 6 mm² • finely stranded with core end processing 1 10 mm² type of connectable conductor cross-sections 1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²) • finely stranded with core end processing 1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²) — finely stranded with core end processing 1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²) — finely stranded with core end processing 1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²) — finely stranded with core end processing 1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²) — finely stranded with core end processing 1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²) — finely stranded with core end processing 1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²) — finely stranded with core	fastening method design of the thread of the screw for securing the equipment tightening torque of fixing screw maximum	screw fixing M4 1.5 N·m
product component removable terminal for auxiliary and control circuit type of electrical connection	fastening method design of the thread of the screw for securing the equipment tightening torque of fixing screw maximum tightening torque [lbf·in] of fixing screw maximum	screw fixing M4 1.5 N·m 13 lbf·in
product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit • for auxiliary and control circuit type of connectable conductor cross-sections • for main contacts — solid — finely stranded with core end processing • for AWG cables for main contacts • solid or stranded • finely stranded with core end processing • for auxiliary and control contacts • for AWG cables for auxiliary and control contacts • for AWG cables for auxiliary and control contacts AWG number as coded connectable conductor cross section for	fastening method design of the thread of the screw for securing the equipment tightening torque of fixing screw maximum tightening torque [lbf·in] of fixing screw maximum height	screw fixing M4 1.5 N·m 13 lbf·in 95 mm
type of electrical connection • for main current circuit • for auxiliary and control circuit type of connectable conductor cross-sections • for main contacts — solid — finely stranded with core end processing • for AWG cables for main contacts • solid or stranded • finely stranded with core end processing • for auxiliary and control contacts • solid or stranded • finely stranded with core end processing • for auxiliary and control contacts • for AWG cables for auxiliary and control contacts 1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²)	fastening method design of the thread of the screw for securing the equipment tightening torque of fixing screw maximum tightening torque [lbf·in] of fixing screw maximum height width	screw fixing M4 1.5 N·m 13 lbf·in 95 mm 45 mm
 for main current circuit for auxiliary and control circuit screw-type terminals type of connectable conductor cross-sections for main contacts — solid — finely stranded with core end processing for AWG cables for main contacts solid or stranded finely stranded with core end processing finely stranded with core end processing 1.5 6 mm² finely stranded with core end processing for auxiliary and control contacts for auxiliary and control contacts finely stranded with core end processing for auxiliary and control contacts finely stranded with core end processing finely stranded with core end processing for auxiliary and control contacts finely stranded without core end processing for AWG cables for auxiliary and control contacts for AWG cables for auxiliary and control contacts for AWG connectable conductor cross section for 10 14 	fastening method design of the thread of the screw for securing the equipment tightening torque of fixing screw maximum tightening torque [lbf·in] of fixing screw maximum height width depth	screw fixing M4 1.5 N·m 13 lbf·in 95 mm 45 mm
• for auxiliary and control circuit type of connectable conductor cross-sections • for main contacts — solid — finely stranded with core end processing • for AWG cables for main contacts • solid or stranded • finely stranded with core end processing • for auxiliary and control contacts — solid — finely stranded with core end processing • for auxiliary and control contacts — solid — finely stranded with core end processing • for auxiliary and control contacts — solid — finely stranded with core end processing — finely stranded with core end processing — finely stranded without core end processing — finely stranded without core end processing • for AWG cables for auxiliary and control contacts AWG number as coded connectable conductor cross section for 10 14	fastening method design of the thread of the screw for securing the equipment tightening torque of fixing screw maximum tightening torque [lbf·in] of fixing screw maximum height width depth Connections/ Terminals product component removable terminal for auxiliary and	screw fixing M4 1.5 N·m 13 lbf·in 95 mm 45 mm 47 mm
type of connectable conductor cross-sections • for main contacts — solid — finely stranded with core end processing • for AWG cables for main contacts • solid or stranded • finely stranded with core end processing • for auxiliary and control contacts — solid — finely stranded with core end processing • for auxiliary and control contacts — solid — finely stranded with core end processing — finely stranded without core end processing — finely stranded without core end processing — finely stranded without core end processing • for AWG cables for auxiliary and control contacts AWG number as coded connectable conductor cross section for 10 14	fastening method design of the thread of the screw for securing the equipment tightening torque of fixing screw maximum tightening torque [lbf·in] of fixing screw maximum height width depth Connections/ Terminals product component removable terminal for auxiliary and control circuit	screw fixing M4 1.5 N·m 13 lbf·in 95 mm 45 mm 47 mm
 for main contacts — solid — finely stranded with core end processing • for AWG cables for main contacts • solid or stranded • finely stranded with core end processing • finely stranded with core end processing • for auxiliary and control contacts — solid — solid — finely stranded with core end processing • for auxiliary and control contacts — solid — finely stranded with core end processing 1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²) — finely stranded without core end processing 1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²) — finely stranded without core end processing • for AWG cables for auxiliary and control contacts 1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²) 1x (0.5 1.0 mm²)	fastening method design of the thread of the screw for securing the equipment tightening torque of fixing screw maximum tightening torque [lbf·in] of fixing screw maximum height width depth Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection	screw fixing M4 1.5 N·m 13 lbf·in 95 mm 45 mm 47 mm
solid finely stranded with core end processing for AWG cables for main contacts solid or stranded finely stranded with core end processing solid or stranded finely stranded with core end processing solid or stranded finely stranded with core end processing solid finely stranded with core end processing finely stranded without c	fastening method design of the thread of the screw for securing the equipment tightening torque of fixing screw maximum tightening torque [lbf·in] of fixing screw maximum height width depth Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit	screw fixing M4 1.5 N·m 13 lbf·in 95 mm 45 mm 47 mm Yes screw-type terminals
 — finely stranded with core end processing ● for AWG cables for main contacts Ex (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² 2x (14 10) Connectable conductor cross-section for main contacts ● solid or stranded ● finely stranded with core end processing 1 10 mm² type of connectable conductor cross-sections ● for auxiliary and control contacts — solid — finely stranded with core end processing — finely stranded with core end processing — finely stranded without core end processing — for AWG cables for auxiliary and control contacts AWG number as coded connectable conductor cross section for 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² 1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²) 1x (AWG 20 12) 	fastening method design of the thread of the screw for securing the equipment tightening torque of fixing screw maximum tightening torque [lbf-in] of fixing screw maximum height width depth Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit • for auxiliary and control circuit	screw fixing M4 1.5 N·m 13 lbf·in 95 mm 45 mm 47 mm Yes screw-type terminals
 for AWG cables for main contacts connectable conductor cross-section for main contacts solid or stranded finely stranded with core end processing type of connectable conductor cross-sections for auxiliary and control contacts — solid — finely stranded with core end processing — finely stranded with core end processing — finely stranded without core end processing — finely stranded without core end processing — for AWG cables for auxiliary and control contacts 1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²) 1x (AWG 20 12) AWG number as coded connectable conductor cross section for	fastening method design of the thread of the screw for securing the equipment tightening torque of fixing screw maximum tightening torque [lbf·in] of fixing screw maximum height width depth Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit • for auxiliary and control circuit type of connectable conductor cross-sections	screw fixing M4 1.5 N·m 13 lbf·in 95 mm 45 mm 47 mm Yes screw-type terminals
connectable conductor cross-section for main contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary and control contacts — solid — finely stranded with core end processing — finely stranded with core end processing — finely stranded without core end processing • for AWG cables for auxiliary and control contacts AWG number as coded connectable conductor cross section for 1.5 6 mm² 1 10 mm² 1 10 mm² 1 2.5 mm²), 2x (0.5 1.0 mm²) 1 10 mm²	fastening method design of the thread of the screw for securing the equipment tightening torque of fixing screw maximum tightening torque [lbf·in] of fixing screw maximum height width depth Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit • for auxiliary and control circuit type of connectable conductor cross-sections • for main contacts	screw fixing M4 1.5 N·m 13 lbf·in 95 mm 45 mm 47 mm Yes screw-type terminals screw-type terminals
 solid or stranded finely stranded with core end processing type of connectable conductor cross-sections for auxiliary and control contacts solid finely stranded with core end processing finely stranded with core end processing finely stranded without core end processing for AWG cables for auxiliary and control contacts AWG number as coded connectable conductor cross section for 1.5 6 mm² 1 10 mm² 1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²) 1x (AWG 20 12) 	fastening method design of the thread of the screw for securing the equipment tightening torque of fixing screw maximum tightening torque [lbf·in] of fixing screw maximum height width depth Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit • for auxiliary and control circuit type of connectable conductor cross-sections • for main contacts — solid	screw fixing M4 1.5 N·m 13 lbf·in 95 mm 45 mm 47 mm Yes screw-type terminals screw-type terminals
 ◆ finely stranded with core end processing type of connectable conductor cross-sections ◆ for auxiliary and control contacts — solid — finely stranded with core end processing — finely stranded without core end processing — finely stranded without core end processing — for AWG cables for auxiliary and control contacts AWG number as coded connectable conductor cross section for 1 10 mm² 1 x (0.5 2.5 mm²), 2x (0.5 1.0 mm²) 1 x (0.5 2.5 mm²), 2x (0.5 1.0 mm²) 1 x (AWG 20 12) 	fastening method design of the thread of the screw for securing the equipment tightening torque of fixing screw maximum tightening torque [lbf-in] of fixing screw maximum height width depth Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit • for auxiliary and control circuit type of connectable conductor cross-sections • for main contacts — solid — finely stranded with core end processing	screw fixing M4 1.5 N·m 13 lbf·in 95 mm 45 mm 47 mm Yes screw-type terminals screw-type terminals 2x (1.5 2.5 mm²), 2x (2.5 6 mm²) 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²
type of connectable conductor cross-sections • for auxiliary and control contacts — solid — finely stranded with core end processing — finely stranded without core end processing — for AWG cables for auxiliary and control contacts AWG number as coded connectable conductor cross section for 1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²) 1x (AWG 20 12) 1x (AWG 20 12)	fastening method design of the thread of the screw for securing the equipment tightening torque of fixing screw maximum tightening torque [lbf·in] of fixing screw maximum height width depth Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit • for auxiliary and control circuit type of connectable conductor cross-sections • for main contacts — solid — finely stranded with core end processing • for AWG cables for main contacts	screw fixing M4 1.5 N·m 13 lbf·in 95 mm 45 mm 47 mm Yes screw-type terminals screw-type terminals 2x (1.5 2.5 mm²), 2x (2.5 6 mm²) 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²
 for auxiliary and control contacts — solid — finely stranded with core end processing — finely stranded without core end processing — for AWG cables for auxiliary and control contacts AWG number as coded connectable conductor cross section for Ix (0.5 2.5 mm²), 2x (0.5 1.0 mm²) Ix (AWG 20 12) Ix (AWG 20 14) 	fastening method design of the thread of the screw for securing the equipment tightening torque of fixing screw maximum tightening torque [lbf·in] of fixing screw maximum height width depth Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit • for auxiliary and control circuit type of connectable conductor cross-sections • for main contacts — solid — finely stranded with core end processing • for AWG cables for main contacts connectable conductor cross-section for main contacts	screw fixing M4 1.5 N·m 13 lbf·in 95 mm 45 mm 47 mm Yes screw-type terminals screw-type terminals 2x (1.5 2.5 mm²), 2x (2.5 6 mm²) 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² 2x (14 10)
 — solid — finely stranded with core end processing — finely stranded without core end processing — finely stranded without core end processing — for AWG cables for auxiliary and control contacts AWG number as coded connectable conductor cross section for 1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²) 1x (AWG 20 12) 10 14 	fastening method design of the thread of the screw for securing the equipment tightening torque of fixing screw maximum tightening torque [lbf·in] of fixing screw maximum height width depth Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit • for auxiliary and control circuit type of connectable conductor cross-sections • for main contacts — solid — finely stranded with core end processing • for AWG cables for main contacts connectable conductor cross-section for main contacts • solid or stranded	screw fixing M4 1.5 N·m 13 lbf·in 95 mm 45 mm 47 mm Yes screw-type terminals screw-type terminals 2x (1.5 2.5 mm²), 2x (2.5 6 mm²) 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² 2x (14 10) 1.5 6 mm²
 — finely stranded with core end processing — finely stranded without core end processing — for AWG cables for auxiliary and control contacts AWG number as coded connectable conductor cross section for 1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²) 1x (AWG 20 12) 10 14 	fastening method design of the thread of the screw for securing the equipment tightening torque of fixing screw maximum tightening torque [lbf·in] of fixing screw maximum height width depth Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit • for auxiliary and control circuit type of connectable conductor cross-sections • for main contacts — solid — finely stranded with core end processing • for AWG cables for main contacts connectable conductor cross-section for main contacts • solid or stranded • finely stranded with core end processing	screw fixing M4 1.5 N·m 13 lbf·in 95 mm 45 mm 47 mm Yes screw-type terminals screw-type terminals 2x (1.5 2.5 mm²), 2x (2.5 6 mm²) 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² 2x (14 10) 1.5 6 mm²
 — finely stranded without core end processing 1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²) 1x (AWG 20 12) AWG number as coded connectable conductor cross section for 10 14 	fastening method design of the thread of the screw for securing the equipment tightening torque of fixing screw maximum tightening torque [lbf·in] of fixing screw maximum height width depth Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit • for auxiliary and control circuit type of connectable conductor cross-sections • for main contacts — solid — finely stranded with core end processing • for AWG cables for main contacts connectable conductor cross-section for main contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections	screw fixing M4 1.5 N·m 13 lbf·in 95 mm 45 mm 47 mm Yes screw-type terminals screw-type terminals 2x (1.5 2.5 mm²), 2x (2.5 6 mm²) 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² 2x (14 10) 1.5 6 mm²
• for AWG cables for auxiliary and control contacts 1x (AWG 20 12) AWG number as coded connectable conductor cross section for 10 14	fastening method design of the thread of the screw for securing the equipment tightening torque of fixing screw maximum tightening torque [lbf·in] of fixing screw maximum height width depth Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit • for auxiliary and control circuit type of connectable conductor cross-sections • for main contacts — solid — finely stranded with core end processing • for AWG cables for main contacts connectable conductor cross-section for main contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary and control contacts	screw fixing M4 1.5 N·m 13 lbf·in 95 mm 45 mm 47 mm Yes screw-type terminals screw-type terminals 2x (1.5 2.5 mm²), 2x (2.5 6 mm²) 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² 2x (14 10) 1.5 6 mm² 1 10 mm²
AWG number as coded connectable conductor cross section for 10 14	fastening method design of the thread of the screw for securing the equipment tightening torque of fixing screw maximum tightening torque [lbf·in] of fixing screw maximum height width depth Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit • for auxiliary and control circuit type of connectable conductor cross-sections • for main contacts — solid — finely stranded with core end processing • for AWG cables for main contacts connectable conductor cross-section for main contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary and control contacts • for auxiliary and control contacts • solid	screw fixing M4 1.5 N·m 13 lbf·in 95 mm 45 mm 47 mm Yes screw-type terminals screw-type terminals 2x (1.5 2.5 mm²), 2x (2.5 6 mm²) 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² 2x (14 10) 1.5 6 mm² 1 10 mm²
	fastening method design of the thread of the screw for securing the equipment tightening torque of fixing screw maximum tightening torque [lbf-in] of fixing screw maximum height width depth Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit • for auxiliary and control circuit type of connectable conductor cross-sections • for main contacts — solid — finely stranded with core end processing • for AWG cables for main contacts connectable conductor cross-section for main contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary and control contacts — solid — finely stranded with core end processing	Screw fixing M4 1.5 N·m 13 lbf·in 95 mm 45 mm 47 mm Yes screw-type terminals screw-type terminals 2x (1.5 2.5 mm²), 2x (2.5 6 mm²) 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² 2x (14 10) 1.5 6 mm² 1 10 mm² 1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²)
	fastening method design of the thread of the screw for securing the equipment tightening torque of fixing screw maximum tightening torque [lbf·in] of fixing screw maximum height width depth Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit • for auxiliary and control circuit type of connectable conductor cross-sections • for main contacts — solid — finely stranded with core end processing • for AWG cables for main contacts connectable conductor cross-section for main contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary and control contacts — solid — finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary and control contacts — solid — finely stranded with core end processing — finely stranded without core end processing	screw fixing M4 1.5 N·m 13 lbf-in 95 mm 45 mm 47 mm Yes screw-type terminals screw-type terminals 2x (1.5 2.5 mm²), 2x (2.5 6 mm²) 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² 2x (14 10) 1.5 6 mm² 1 10 mm² 1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²)

tightening torque	
 for main contacts with screw-type terminals 	2 2.5 N·m
 for auxiliary and control contacts with screw-type terminals 	0.5 0.6 N·m
tightening torque [lbf·in]	
 for main contacts with screw-type terminals 	18 22 lbf·in
 for auxiliary and control contacts with screw-type terminals 	4.5 5.3 lbf·in
design of the thread of the connection screw	
for main contacts	M4
of the auxiliary and control contacts	M3
stripped length of the cable	
for main contacts	7 mm
for auxiliary and control contacts	7 mm
Electrical Safety	
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
Ambient conditions	
installation altitude at height above sea level maximum	1 000 m
ambient temperature	
 during operation 	-25 +60 °C
during storage	-55 +80 °C
Electromagnetic compatibility	
conducted interference	
 due to burst according to IEC 61000-4-4 	2 kV / 5 kHz behavior criterion 2
• due to conductor-earth surge according to IEC 61000-4-5	2 kV behavior criterion 2
 due to conductor-conductor surge according to IEC 61000-4-5 	1 kV behavior criterion 2
 due to high-frequency radiation according to IEC 61000- 4-6 	140 dBuV in the frequency range 0.15 80 MHz, behavior criterion 1
electrostatic discharge according to IEC 61000-4-2	4 kV contact discharging / 8 kV air discharging, behavior criterion 2
conducted HF interference emissions according to CISPR11	Class A for industrial environment
field-bound HF interference emission according to CISPR11	Class A for industrial environment
Short-circuit protection, design of the fuse link	
manufacturer's article number	
 of full range R fuse link for semiconductor protection at NH design usable 	3NE1814-0; These fuses have a smaller rated current than the semiconductor relays
 of back-up R fuse link for semiconductor protection at NH design usable 	3NE8003-1
 of back-up R fuse link for semiconductor protection at cylindrical design 10 x 38 mm usable 	3NC1025: These fuses have a smaller rated current than the semiconductor relays
 of back-up R fuse link for semiconductor protection at cylindrical design 14 x 51 mm usable 	<u>3NC1430</u>
 of back-up R fuse link for semiconductor protection at cylindrical design 22 x 58 mm usable 	<u>3NC2232</u>
manufacturer's article number of the gG fuse at NH design usable	
• up to 460 V	3NA3803-6; These fuses have a smaller rated current than the semiconductor relays
● up to 600 V	3NA3803-6; These fuses have a smaller rated current than the semiconductor relays
Approvals Certificates	

General Product Approval

EMV





Confirmation







Test Certificates other Environment



Further information

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

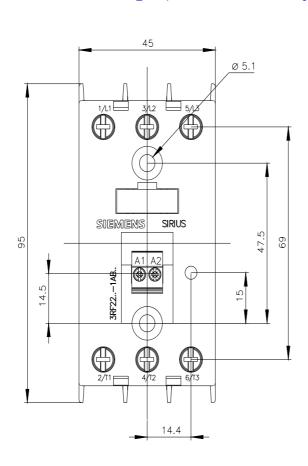
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RF2230-1AB45

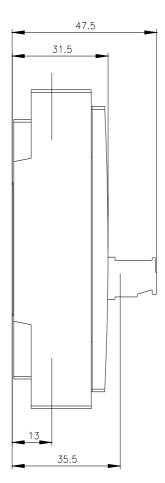
Cax online generator

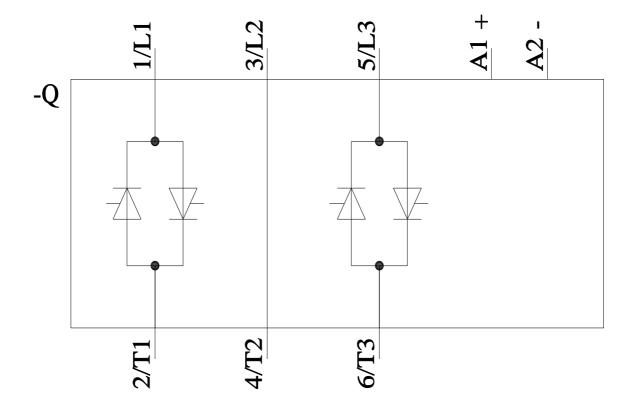
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RF2230-1AB45

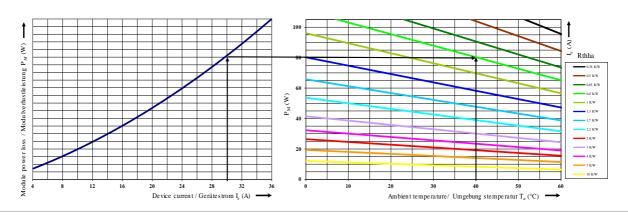
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RF2230-1AB45

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RF2230-1AB45&lang=en









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