## **SIEMENS**

Data sheet 3RF2410-1AB55



Solid-state contactor 3-phase 3RF2 AC 51 / 10 A / 40  $^{\circ}$ C 48-600 V / 230 V AC 2-phase controlled screw terminal Blocking voltage 1200 V

product brand name product design of the product design of the product product type designation  General technical data product function power loss [W] for rated value of the current • at AC in hot operating state • of the control super state value degree of pollution 3  type of voltage • of the control supply voltage AC  Surge voltage resistance of main circuit rated value 6 kV shock resistance according to IEC 60068-2-27 vibration resistance according to IEC 60068-2-20 greference code according to IEC 81446-2 reference code according to IEC 81446-2 Reference code according to IEC 81446-2 Substance Prohibitance (Date)  SVHC substance name  Lead -7439-92-1 Lead -743		
design of the product product type designation 3RF24  product type designation 2 sero-point switching  prower loss [W] for rated value of the current  at AC in hot operating state 23 W without load current share typical 3.5 W insulation vottage rated value 600 V  degree of pollution 3  type of voltage of the control supply voltage AC surge voltage resistance of main circuit rated value 6 kV shock resistance according to IEC 60068-2-6 76 V vibration resistance according to IEC 60068-2-6 2g reference code according to IEC 81346-2 Q reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 7701/2006  SVHC substance name  Main circuit number of NO contacts for main current circuit 3 number of NO contacts for main current circuit 3 number of NO contacts for main current circuit 48 600 V  at AC  at AC  - at 50 Hz rated value 48 600 V  at 60 Hz  at 60 Hz  40 H2 660 V  40 660 V	product brand name	SIRIUS
product type designation  General technical data  product function  power loss [W] for rated value of the current  * at AC in hot operating state 23 W  * at AC in hot operating state per pole 7.67 W  * without load current share typical 3.5 W  insulation voltage rated value 600 V  degree of pollution 3  type of voltage  * of the operating voltage AC  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 60068-2-2 2g  reference code according to IEC 60068-2-2 2g  reference code according to IEC 60068-2-2 Q  reference code according to IEC 60068-2-2 Q  reference code according to IEC 81346-2 Q  Substance Prohibitance (Date) 07/01/2006  SVHC substance name Leaf - 7439-92-1  Lead monoxide (lead oxide) - 1317-36-8  Disulptions for main current circuit 3  number of Doles for main current circuit 3  number of NC contacts for main contacts 0  type of voltage of the operating voltage AC  — at 50 Hz rated value 48 600 V  • at 60 Hz 4 at 60 Hz  • at 60 Hz	product designation	solid-state contactor
Description	design of the product	two-phase controlled
product function  power loss [W] for rated value of the current  at AC in hot operating state 23 W  without load current share typical 3.5 W  insulation voltage rated value 600 V  degree of pollution 3  type of voltage  of the operating voltage AC  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 60068-2-27 15g / 11 ms  vibration resistance according to IEC 60068-2-6 2g  reference code according to IEC 60068-2-6 QQ  reference code according to IEC 60068-2-6 QQ  reference code according to IEC 81346-2 QQ  reference Prohibitance (Date) 7701/2006  SVHC substance Prohibitance (Date) 7701/2006  SVHC substance name	product type designation	3RF24
power loss [W] for rated value of the current  at AC in hot operating state 23 W at AC in hot operating state per pole 7.67 W without load current share typical 3.5 W insulation voltage rated value 600 V degree of pollution 3 type of voltage of the control supply voltage AC 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 IDN 40719 extended according to IEC 60068-2-6 2g reference code according to IEC 81346-2 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 Dibutybis/pentane-2,4-dionato-O,0'\tin - 22673-19-4  Main circuit number of NO contacts for main current circuit 3 number of NC contacts for main contacts 2 number of NC contacts for main contacts 0 type of voltage of the operating voltage • at AC — at 60 Hz rated value 48 600 V operating frequency rated value 50 60 Hz relative symmetrical tolerance of the operating frequency operating range relative to the operating voltage at AC • at 60 Hz • at 60 Hz • at 60 Hz	General technical data	
at AC in hot operating state per pole  without load current share typical  without load current share typical  insulation voltage rated value  degree of pollution  type of voltage  of the operating voltage  of the operating voltage  of the control supply voltage  of the control supply voltage  of the control supply voltage  AC  Surge voltage resistance of main circuit rated value  block resistance according to IEC 60068-2-7  vibration resistance according to IEC 60068-2-6  greference code according to DIN 40719 extended according to IEC 204-2 according to IEC 750  reference code according to EN 61346-2  qreference code according to IEC 81346-2  Q  reference code according to IEC 81346-2  Q  Substance Prohibitance (Date)  SVHC substance name  Lead - 7439-92-1  Lead monoxide (lead oxide) - 1317-36-8  Dibutylbis/pentance-2,4-dionato-0,0/jtin - 22673-19-4  Main circuit  number of poles for main current circuit  number of NC contacts for main contacts  1 ype of voltage of the operating voltage  old AC  at 50 Hz rated value  - at 60 Hz rated value  operating frequency rated value  relative symmetrical tolerance of the operating frequency  operating range relative to the operating voltage at AC  at 50 Hz  at 60 Hz  40 660 V  40 660 V  40 660 V  40 660 V	product function	zero-point switching
* at AC in hot operating state per pole     * without load current share typical     insulation voltage rated value     degree of pollution     3     type of voltage     * of the operating voltage     * of the control supply voltage     * surge voltage resistance according to IEC 60068-2-7     * shock resistance according to IEC 60068-2-7     vibration resistance according to IEC 60068-2-6     vibration resistance according to IEC 60	power loss [W] for rated value of the current	
without load current share typical     insulation voltage rated value     degree of pollution     3  type of voltage         • of the operating voltage         • of the operating voltage         • of the control supply voltage         • of the operating voltage         • AC         • shock resistance of main circuit rated value         • Shock resistance according to IEC 60068-2-7         vibration resistance according to IEC 60068-2-6         2g         reference code according to DIN 40719 extended according to IEC 29         reference code according to EIC 750         reference code according to EIC 81346-2         Q         reference code according to IEC 81346-2         Q         Volume to IEC 81346-2         Q         reference code according to IEC 81346	<ul> <li>at AC in hot operating state</li> </ul>	23 W
insulation voltage rated value degree of pollution type of voltage of the operating voltage of the operating voltage of the control supply voltage AC surge voltage resistance or main circuit rated value block resistance according to IEC 60068-2-27 ivibration resistance according to IEC 60068-2-6 2g reference code according to IEC 60068-2-6 2g reference code according to IEC 750 reference code according to IEC 750 reference code according to IEC 81346-2 Q Reference code according to IEC 8	<ul> <li>at AC in hot operating state per pole</li> </ul>	7.67 W
degree of pollution  type of voltage  of the operating voltage  of the control supply voltage  AC  surge voltage resistance of main circuit rated value  shock resistance according to IEC 60068-2-27  vibration resistance according to IEC 60068-2-6  greference code according to DIN 40719 extended according to IEC 2042 according to DIN 40719 extended according to IEC 2042 according to EIC 81346-2  qreference code according to EIC 61346-2  Q  Substance Prohibitance (Date)  SVHC substance name  Lead -7439-92-1  Lead monoxide (lead oxide) - 1317-36-8  Dibutylbis (pentane-2,4-dionato-Q,O')tin - 22673-19-4  Main circuit  number of poles for main current circuit  number of NC contacts for main contacts  type of voltage of the operating voltage  at AC  —at 50 Hz rated value —at 60 Hz rated value  relative symmetrical tolerance of the operating frequency  operating requency rated value  relative symmetrical tolerance of the operating frequency  operating relative to the operating voltage at AC  at 50 Hz  at 60 Hz  at 60 Hz  at 60 Hz  40 660 V  at 60 Hz  at 60 V  at 60 V	without load current share typical	3.5 W
type of voltage  of the operating voltage  of the operating voltage  AC  of the control supply voltage  AC  surge voltage resistance of main circuit rated value  shock resistance according to IEC 60068-2-27  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  reference code according to EC 750  reference code according to EN 61346-2  Q  reference code according to IEC 81346-2  Q  Substance Prohibitance (Date)  SVHC substance name  Lead -7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Dibutylbis(pentane-2,4-dionato-O,0')tin - 22673-19-4  Main circuit  number of poles for main current circuit  1 number of NC contacts for main contacts  1 unmber of NC contacts for main contacts  1 type of voltage of the operating voltage  operating voltage  at AC  - at 50 Hz rated value  - at 60 Hz rated value  operating requency rated value  relative symmetrical tolerance of the operating frequency  operating range relative to the operating voltage at AC  at 50 Hz  at 60 Hz  40 660 V  at 60 Hz  40 660 V	insulation voltage rated value	600 V
of the operating voltage of the control supply voltage Surge voltage resistance of main circuit rated value 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 reference code according to EN 61346-2 Q reference code according to EN 61346-2 Q Substance Prohibitance (Date)  SYHC substance name  Lead -7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Dibutylbis(pentane-2,4-dionato-O,O')tin - 22673-19-4  Main circuit number of poles for main current circuit 3 number of NC contacts for main contacts 2 number of NC contacts for main contacts 0 type of voltage of the operating voltage at AC —at 50 Hz rated value —at 60 Hz rated value —at 60 Hz rated value operating range relative to the operating voltage at AC  eat 50 Hz  at 50 Hz  at 50 Hz  40 660 V  at 50 Hz  40 660 V  at 60 Hz  40 660 V  at 60 Hz	degree of pollution	3
of the control supply voltage surge voltage resistance of main circuit rated value shock resistance according to IEC 60068-2-27 tibg/11 ms vibration resistance according to IEC 60068-2-6 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 reference code according to EEC 81346-2 Q reference code according to EEC 81346-2 Q Substance Prohibitance (Date)  SVHC substance name  Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Dibutylbis(pentane-2,4-dionato-O,O')tin - 22673-19-4  Main circuit number of poles for main current circuit a number of NO contacts for main contacts cype of voltage of the operating voltage of voltage of the operating voltage at AC — at 50 Hz rated value — at 60 Hz rated value  operating requency rated value relative symmetrical tolerance of the operating frequency operating range relative to the operating voltage at AC  of at 50 Hz  at 60 Hz  40 660 V	type of voltage	
surge voltage resistance of main circuit rated value 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 500 reference code according to EIC 61068-2-2 Q reference code according to IEC 81346-2 Q Substance Prohibitance (Date)  SVHC substance name  Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Dibutylbis(pentane-2,4-dionato-0,0')tin - 22673-19-4  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 type of voltage of the operating voltage • at AC — at 50 Hz rated value — at 60 Hz rated value  operating frequency rated value relative symmetrical tolerance of the operating roltage at AC  • at 50 Hz • at 60 Hz  • at 60 Hz  • at 60 Hz  40 660 V	<ul> <li>of the operating voltage</li> </ul>	AC
shock resistance according to IEC 60068-2-27  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  reference code according to EN 61346-2  Q  reference code according to IEC 81346-2  Q  Substance Prohibitance (Date)  SYHC substance name  Lead -7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Dibutylbis(pentane-2,4-dionato-O,O')tin - 22673-19-4  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  10  type of voltage of the operating voltage  • at AC  — at 50 Hz rated value — at 60 Hz rated value  operating frequency rated value  relative symmetrical tolerance of the operating frequency  operating range relative to the operating voltage at AC  • at 50 Hz  • at 50 Hz  • at 60 Hz  • at 60 Hz  40 660 V  • at 60 Hz	of the control supply voltage	AC
vibration resistance according to IEC 60068-2-6  reference code according to DIN 40719 extended according to IEC 204-2 according to IEC 750  reference code according to EN 61346-2  Q reference code according to IEC 81346-2  Q Substance Prohibitance (Date)  SVHC substance name  Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Dibutylbis(pentane-2,4-dionato-O,0')tin - 22673-19-4  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  at AC  — at 50 Hz rated value — at 60 Hz rated value  operating frequency rated value  relative symmetrical tolerance of the operating frequency  operating range relative to the operating voltage at AC  at 50 Hz  at 50 Hz  at 60 Hz  48 660 V  at 60 Hz  40 660 V  at 60 Hz	surge voltage resistance of main circuit rated value	6 kV
reference code according to DIN 40719 extended according to IEC 204-2 according to IEC 750  reference code according to EN 61346-2  Q reference code according to IEC 81346-2  Q Substance Prohibitance (Date)  SVHC substance name  Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Dibutylbis(pentane-2,4-dionato-O,O')tin - 22673-19-4  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  at AC  — at 50 Hz rated value — at 60 Hz rated value  operating frequency rated value  relative symmetrical tolerance of the operating frequency  operating range relative to the operating voltage at AC  at 50 Hz  at 50 Hz  at 50 Hz  40 660 V  at 60 V  at 60 Hz	shock resistance according to IEC 60068-2-27	15g / 11 ms
to IEC 204-2 according to IEC 750  reference code according to EN 61346-2  Q reference code according to IEC 81346-2  Q Substance Prohibitance (Date)  SVHC substance name  Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Dibutylbis(pentane-2,4-dionato-O,O')tin - 22673-19-4  Main circuit  number of poles for main current circuit  number of NO contacts for main contacts  1 cumber of NC contacts for main contacts  1 cumber of NC contacts for main contacts  2 cumber of NC contacts for main contacts  2 cumber of NC contacts for main contacts  4 cumber of NC contacts for main contacts  4 cumber of NC contacts for main contacts  5 cumber of NC contacts for main contacts  4 cumber of NC contacts for main contacts  4 cumber of NC contacts for main contacts  5 cumber of NC contacts for main contacts  6 cumber of NC contacts for main contacts  9 cumber of NC contacts for main contacts  1 cumber of NC contacts for main contacts  2 cumber of NC contacts for main contacts  4 cumber of NC contacts for main contacts  5 cumber of NC contacts for main contacts  6 cumber of NC contacts for main	vibration resistance according to IEC 60068-2-6	2g
reference code according to IEC 81346-2  Substance Prohibitance (Date)  SVHC substance name  Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Dibutylbis(pentane-2,4-dionato-O,O')tin - 22673-19-4  Main circuit  number of poles for main current circuit  number of NO contacts for main contacts  number of NC contacts for main contacts  type of voltage of the operating voltage  • at AC  — at 50 Hz rated value  - at 60 Hz rated value  relative symmetrical tolerance of the operating requency  operating range relative to the operating voltage at AC  • at 50 Hz  • at 60 Hz  40 660 V  40 660 V  - at 60 Hz		К
Substance Prohibitance (Date)  SVHC substance name  Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Dibutylbis(pentane-2,4-dionato-O,O')tin - 22673-19-4  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  • at AC  — at 50 Hz rated value — at 60 Hz rated value  relative symmetrical tolerance of the operating voltage at AC  • at 50 Hz • at 60 Hz  • at 60 Hz  • at 60 Hz  • at 60 Hz  • at 60 Hz  • at 60 Hz  • at 60 Hz  • at 60 Hz  • at 60 Hz  • at 60 Hz  • at 60 Hz  • at 60 Hz  • at 60 Hz  • at 60 Hz	reference code according to EN 61346-2	Q
SVHC substance name  Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Dibutylbis(pentane-2,4-dionato-O,O')tin - 22673-19-4  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	reference code according to IEC 81346-2	Q
Lead monoxide (lead oxide) - 1317-36-8 Dibutylbis(pentane-2,4-dionato-O,O')tin - 22673-19-4  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 50 60 Hz  relative symmetrical tolerance of the operating frequency 10 %  operating range relative to the operating voltage at AC  • at 50 Hz  • at 60 Hz  40 660 V  40 660 V	Substance Prohibitance (Date)	07/01/2006
number of poles for main current circuit  number of NO contacts for main contacts  2 number of NC contacts for main contacts  type of voltage of the operating voltage  • at AC  — at 50 Hz rated value — at 60 Hz rated value  relative symmetrical tolerance of the operating frequency  • at 50 Hz  • at 50 Hz  • at 50 Hz  • at 50 Hz  • at 60 Hz  40 660 V  40 660 V	SVHC substance name	Lead monoxide (lead oxide) - 1317-36-8
number of NO contacts for main contacts  1 number of NC contacts for main contacts  1 type of voltage of the operating voltage  1 operating voltage  1 at AC  1 at 50 Hz rated value  1 at 60 Hz rated value  2 operating frequency rated value  2 operating frequency rated value  3 contacts for main contacts  4 contacts for main contacts	Main circuit	
number of NC contacts for main contacts  type of voltage of the operating voltage  • at AC  — at 50 Hz rated value — at 60 Hz rated value  operating frequency rated value  relative symmetrical tolerance of the operating frequency  • at 50 Hz  • at 50 Hz  • at 50 Hz  • at 60 Hz  48 600 V  50 60 Hz  relative symmetrical tolerance of the operating frequency  operating range relative to the operating voltage at AC  • at 50 Hz  • at 60 Hz  40 660 V  • at 60 Hz	number of poles for main current circuit	3
type of voltage of the operating voltage  • at AC  — at 50 Hz rated value — at 60 Hz rated value 48 600 V  operating frequency rated value  relative symmetrical tolerance of the operating frequency  operating range relative to the operating voltage at AC  • at 50 Hz  • at 60 Hz  40 660 V  • at 60 Hz	number of NO contacts for main contacts	2
operating voltage	number of NC contacts for main contacts	0
• at AC     — at 50 Hz rated value     — at 60 Hz rated value     48 600 V  operating frequency rated value  felative symmetrical tolerance of the operating frequency operating range relative to the operating voltage at AC      • at 50 Hz     • at 60 Hz  48 600 V  10 %  40 660 V  40 660 V	type of voltage of the operating voltage	AC
<ul> <li>— at 50 Hz rated value</li> <li>— at 60 Hz rated value</li> <li>48 600 V</li> <li>operating frequency rated value</li> <li>50 60 Hz</li> <li>relative symmetrical tolerance of the operating frequency</li> <li>operating range relative to the operating voltage at AC</li> <li>● at 50 Hz</li> <li>● at 60 Hz</li> <li>40 660 V</li> <li>◆ at 60 Hz</li> <li>40 660 V</li> </ul>	operating voltage	
— at 60 Hz rated value  operating frequency rated value  felative symmetrical tolerance of the operating frequency operating range relative to the operating voltage at AC  o at 50 Hz  at 60 Hz  48 600 V  40 660 V  40 660 V	• at AC	
operating frequency rated value  relative symmetrical tolerance of the operating frequency  operating range relative to the operating voltage at AC  • at 50 Hz  • at 60 Hz  40 660 V  • at 60 Hz	— at 50 Hz rated value	48 600 V
relative symmetrical tolerance of the operating frequency  operating range relative to the operating voltage at AC  • at 50 Hz  • at 60 Hz  40 660 V  40 660 V	— at 60 Hz rated value	48 600 V
operating range relative to the operating voltage at AC          • at 50 Hz	operating frequency rated value	50 60 Hz
• at 50 Hz     • at 60 Hz     40 660 V     40 660 V	relative symmetrical tolerance of the operating frequency	10 %
• at 60 Hz 40 660 V	operating range relative to the operating voltage at AC	
	● at 50 Hz	40 660 V
operational current	• at 60 Hz	40 660 V
	operational current	

at AC-51 rated value	10.5 A
	7 A
at AC-51 according to IEC 60947-4-3      according to III 508 reted value.	
according to UL 508 rated value	7 A
operational current minimum	100 mA
rate of voltage rise at the thyristor for main contacts maximum permissible	500 V/µs
blocking voltage at the thyristor for main contacts maximum permissible	1 200 V
reverse current of the thyristor	10 mA
derating temperature	40 °C
surge current resistance rated value	200 A
I2t value maximum	200 A²-s
Control circuit/ Control	
type of voltage of the control supply voltage	AC
control supply voltage 1 at AC	
• at 50 Hz	180 230 V
● at 60 Hz	180 230 V
control supply voltage frequency	
• 1 rated value	45 Hz
• 2 rated value	66 Hz
control supply voltage at AC	
• at 50 Hz full-scale value for signal<0> recognition	40 V
at 60 Hz full-scale value for signal<0> recognition	180 V
control supply voltage	
at AC initial value for signal <1> detection	180 V
symmetrical line frequency tolerance	5 Hz
control current at minimum control supply voltage	
• at AC	2 mA
control current at AC rated value	15 mA
ON-delay time	40 ms; additionally max. one half-wave
Auxiliary circuit	,
type of switching contact	normally open contact (NO)
type of switching contact number of NC contacts for auxiliary contacts	normally open contact (NO)
number of NC contacts for auxiliary contacts	0
number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts	0 0
number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of CO contacts for auxiliary contacts	0
number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of CO contacts for auxiliary contacts Installation/ mounting/ dimensions	0 0 0
number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of CO contacts for auxiliary contacts	0 0
number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of CO contacts for auxiliary contacts Installation/ mounting/ dimensions fastening method side-by-side mounting	0 0 Ves screw fixing and snap-on mounting on standard mounting rail 35 mm according
number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of CO contacts for auxiliary contacts Installation/ mounting/ dimensions fastening method side-by-side mounting fastening method  design of the thread of the screw for securing the	0 0 Ves screw fixing and snap-on mounting on standard mounting rail 35 mm according to IEC 60715
number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of CO contacts for auxiliary contacts Installation/ mounting/ dimensions fastening method side-by-side mounting fastening method  design of the thread of the screw for securing the equipment	0 0 Ves screw fixing and snap-on mounting on standard mounting rail 35 mm according to IEC 60715 M4
number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of CO contacts for auxiliary contacts Installation/ mounting/ dimensions fastening method side-by-side mounting fastening method  design of the thread of the screw for securing the equipment height	0 0 Ves screw fixing and snap-on mounting on standard mounting rail 35 mm according to IEC 60715 M4 95 mm
number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of CO contacts for auxiliary contacts Installation/ mounting/ dimensions fastening method side-by-side mounting fastening method  design of the thread of the screw for securing the equipment height width	0 0 0 Yes screw fixing and snap-on mounting on standard mounting rail 35 mm according to IEC 60715 M4 95 mm 45 mm
number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of CO contacts for auxiliary contacts Installation/ mounting/ dimensions fastening method side-by-side mounting fastening method  design of the thread of the screw for securing the equipment height width depth	0 0 0 Yes screw fixing and snap-on mounting on standard mounting rail 35 mm according to IEC 60715 M4 95 mm 45 mm
number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of CO contacts for auxiliary contacts Installation/ mounting/ dimensions fastening method side-by-side mounting fastening method  design of the thread of the screw for securing the equipment height width depth  Connections/ Terminals product component removable terminal for auxiliary and	O O O Yes screw fixing and snap-on mounting on standard mounting rail 35 mm according to IEC 60715 M4 95 mm 45 mm 96.5 mm
number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of CO contacts for auxiliary contacts Installation/ mounting/ dimensions fastening method side-by-side mounting fastening method  design of the thread of the screw for securing the equipment height width depth  Connections/ Terminals product component removable terminal for auxiliary and control circuit	O O O Yes screw fixing and snap-on mounting on standard mounting rail 35 mm according to IEC 60715 M4 95 mm 45 mm 96.5 mm
number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of CO contacts for auxiliary contacts Installation/ mounting/ dimensions fastening method side-by-side mounting fastening method  design of the thread of the screw for securing the equipment height width depth  Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection	O O O Yes screw fixing and snap-on mounting on standard mounting rail 35 mm according to IEC 60715 M4 95 mm 45 mm 96.5 mm
number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of CO contacts for auxiliary contacts Installation/ mounting/ dimensions fastening method side-by-side mounting fastening method  design of the thread of the screw for securing the equipment height width depth  Connections/ Terminals  product component removable terminal for auxiliary and control circuit  type of electrical connection  • for main current circuit	O O O Yes screw fixing and snap-on mounting on standard mounting rail 35 mm according to IEC 60715 M4 95 mm 45 mm 96.5 mm  Yes screw-type terminals
number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of CO contacts for auxiliary contacts Installation/ mounting/ dimensions fastening method side-by-side mounting fastening method  design of the thread of the screw for securing the equipment 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	O O O Yes screw fixing and snap-on mounting on standard mounting rail 35 mm according to IEC 60715 M4 95 mm 45 mm 96.5 mm  Yes screw-type terminals
number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of CO contacts for auxiliary contacts  Installation/ mounting/ dimensions fastening method side-by-side mounting fastening method  design of the thread of the screw for securing the equipment height width depth  Connections/ Terminals  product component removable terminal for auxiliary and control circuit type of electrical connection	O O O Yes screw fixing and snap-on mounting on standard mounting rail 35 mm according to IEC 60715 M4 95 mm 45 mm 96.5 mm  Yes screw-type terminals
number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of CO contacts for auxiliary contacts Installation/ mounting/ dimensions fastening method side-by-side mounting fastening method  design of the thread of the screw for securing the equipment 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	O O O Yes screw fixing and snap-on mounting on standard mounting rail 35 mm according to IEC 60715 M4 95 mm 96.5 mm  Yes screw-type terminals screw-type terminals
number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of CO contacts for auxiliary contacts Installation/ mounting/ dimensions fastening method side-by-side mounting fastening method  design of the thread of the screw for securing the equipment height width depth  Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection	O O O Yes screw fixing and snap-on mounting on standard mounting rail 35 mm according to IEC 60715 M4 95 mm 45 mm 96.5 mm  Yes screw-type terminals screw-type terminals
number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of CO contacts for auxiliary contacts Installation/ mounting/ dimensions fastening method side-by-side mounting fastening method  design of the thread of the screw for securing the equipment height width depth  Connections/ Terminals  product component removable terminal for auxiliary and control circuit type of electrical connection	O O O Yes screw fixing and snap-on mounting on standard mounting rail 35 mm according to IEC 60715 M4 95 mm 45 mm 96.5 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
number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of CO contacts for auxiliary contacts Installation/ mounting/ dimensions fastening method side-by-side mounting fastening method  design of the thread of the screw for securing the equipment 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	O O O Yes screw fixing and snap-on mounting on standard mounting rail 35 mm according to IEC 60715 M4 95 mm 45 mm 96.5 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
number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of CO contacts for auxiliary contacts  Installation/ mounting/ dimensions fastening method side-by-side mounting fastening method  design of the thread of the screw for securing the equipment height width depth  Connections/ Terminals  product component removable terminal for auxiliary and control circuit type of electrical connection	Yes screw fixing and snap-on mounting on standard mounting rail 35 mm according to IEC 60715 M4  95 mm 45 mm 96.5 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)
number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of CO contacts for auxiliary contacts Installation/ mounting/ dimensions fastening method side-by-side mounting fastening method  design of the thread of the screw for securing the equipment height width depth  Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection	Yes screw fixing and snap-on mounting on standard mounting rail 35 mm according to IEC 60715 M4 95 mm 45 mm 96.5 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
number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of CO contacts for auxiliary contacts Installation/ mounting/ dimensions fastening method side-by-side mounting fastening method  design of the thread of the screw for securing the equipment height width depth  Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection	Yes screw fixing and snap-on mounting on standard mounting rail 35 mm according to IEC 60715 M4 95 mm 45 mm 96.5 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
number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of CO contacts for auxiliary contacts  Installation/ mounting/ dimensions  fastening method side-by-side mounting fastening method  design of the thread of the screw for securing the equipment height width depth  Connections/ Terminals  product component removable terminal for auxiliary and control circuit type of electrical connection	Yes screw fixing and snap-on mounting on standard mounting rail 35 mm according to IEC 60715 M4 95 mm 45 mm 96.5 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
number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of CO contacts for auxiliary contacts  Installation/ mounting/ dimensions  fastening method side-by-side mounting fastening method  design of the thread of the screw for securing the equipment height width depth  Connections/ Terminals  product component removable terminal for auxiliary and control circuit type of electrical connection	0 0 0 Ves screw fixing and snap-on mounting on standard mounting rail 35 mm according to IEC 60715 M4 95 mm 45 mm 96.5 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

<ul> <li>finely stranded without core end processing</li> </ul>	1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²)
for AWG cables for auxiliary and control contacts	1x (AWG 20 12)
AWG number as coded connectable conductor cross section for main contacts	14 10
tightening torque	
<ul> <li>for main contacts with screw-type terminals</li> </ul>	2 2.5 N·m
<ul> <li>for auxiliary and control contacts with screw-type terminals</li> </ul>	0.5 0.6 N·m
tightening torque [lbf·in]	
<ul> <li>for main contacts with screw-type terminals</li> </ul>	18 22 lbf·in
<ul> <li>for auxiliary and control contacts with screw-type terminals</li> </ul>	7.5 5.3 lbf·in
design of the thread of the connection screw	
<ul> <li>for main contacts</li> </ul>	M4
of the auxiliary and control contacts	M3
stripped length of the cable	
<ul> <li>for main contacts</li> </ul>	7 mm
<ul> <li>for auxiliary and control contacts</li> </ul>	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
<ul> <li>due to conductor-earth surge according to IEC 61000-4-5</li> </ul>	2 kV behavior criterion 2
due to conductor-conductor surge according to IEC	1 kV behavior criterion 2
61000-4-5	The bolication of the first terms of the first term
<ul> <li>due to high-frequency radiation according to IEC 61000- 4-6</li> </ul>	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	
<ul> <li>of full range R fuse link for semiconductor protection at NH design usable</li> </ul>	<u>3NE1813-0</u>
<ul> <li>of full range R fuse link for semiconductor protection at cylindrical design usable</li> </ul>	5SE1310: Maximum operating voltage 400 V!
<ul> <li>of back-up R fuse link for semiconductor protection at NH design usable</li> </ul>	<u>3NE8015-1</u>
<ul> <li>of back-up R fuse link for semiconductor protection at cylindrical design 10 x 38 mm usable</li> </ul>	3NC1016
<ul> <li>of back-up R fuse link for semiconductor protection at cylindrical design 14 x 51 mm usable</li> </ul>	3NC1420
<ul> <li>of back-up R fuse link for semiconductor protection at cylindrical design 22 x 58 mm usable</li> </ul>	3NC2220
manufacturer's article number of the gG fuse at NH design usable	
• up to 460 V	3NA3801: These fuses have a smaller rated current than the semiconductor relays
Approvals Certificates	
General Product Approval	EMV

UK CA



Confirmation







other

Environment

Type Test Certificates/Test Report

Confirmation



**Environmental Confirmations** 

## **Further information**

Information on the packaging

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

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

Industry Mall (Online ordering system)

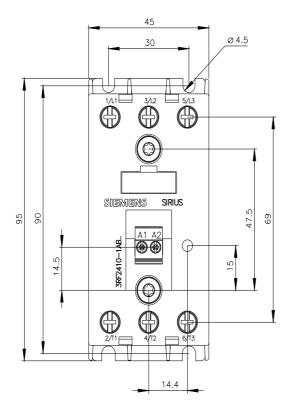
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RF2410-1AB55

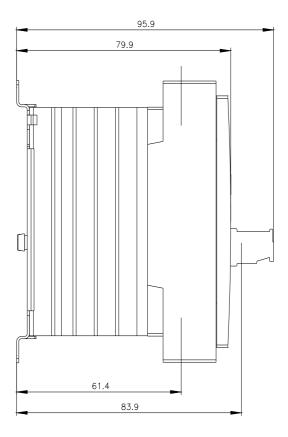
Cax online generator

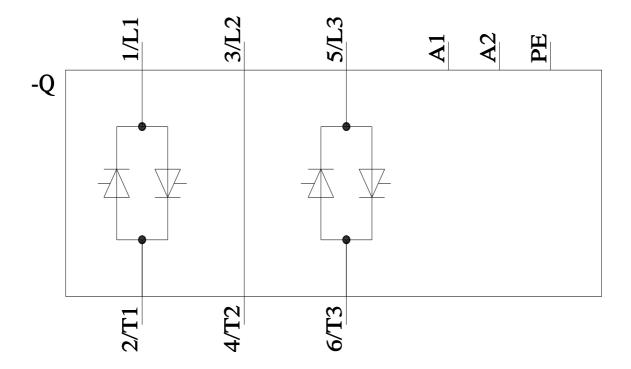
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RF2410-1AB55

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

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RF2410-1AB55&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RF2410-1AB55&lang=en</a>







last modified: 8/12/2024 🖸