SIEMENS

Data sheet

3RV2021-4BA15



Circuit breaker size S0 for motor protection, CLASS 10 A-release 13...20 A N-release 260 A screw terminal Standard switching capacity with transverse auxiliary switches 1 NO+1 NC

product brand name	SIRIUS
product designation	Circuit breaker
design of the product	For motor protection
product type designation	3RV2
General technical data	
size of the circuit-breaker	SO
size of contactor can be combined company-specific	S00, S0
product extension auxiliary switch	Yes
power loss [W] for rated value of the current	
 at AC in hot operating state 	10.5 W
 at AC in hot operating state per pole 	3.5 W
insulation voltage with degree of pollution 3 at AC rated value	690 V
surge voltage resistance rated value	6 kV
shock resistance according to IEC 60068-2-27	25g / 11 ms
mechanical service life (switching cycles)	
 of the main contacts typical 	100 000
 of auxiliary contacts typical 	100 000
electrical endurance (switching cycles) typical	100 000
type of protection according to ATEX directive 2014/34/EU	Ex II (2) GD
certificate of suitability according to ATEX directive 2014/34/EU	DMT 02 ATEX F 001
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/01/2009
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
 during operation 	-20 +60 °C
 during storage 	-50 +80 °C
during transport	-50 +80 °C
relative humidity during operation	10 95 %
Main circuit	
number of poles for main current circuit	3
adjustable current response value current of the current-dependent overload release	13 20 A
operating voltage	
 rated value 	20 690 V
 at AC-3 rated value maximum 	690 V
 at AC-3e rated value maximum 	690 V

Jep control Jep control Jep control operational current at AC3 at 400 V rated value 20 A operating prover 20 A - at 200 V rated value 25 KW - at 200 V rated value 15 KW - at 800 V rated value 10 fm - at 800 V rated value 10 fm - at 800 V rated value 10 fm - at 800 V rated value 0 - at 800 V rated value <t< th=""><th>operating frequency rated value</th><th>50 60 Hz</th></t<>	operating frequency rated value	50 60 Hz
operating power 20 A operating power - at 230 V rated value 5 5 kW - at 230 V rated value 75 kW - at 300 V rated value 1 kW - at 300 V rated value 15 kW - at 300 V rated value 15 kW - at 300 V rated value 55 kW - at 300 V rated value 75 kW - at 300 V rated value 75 kW - at 300 V rated value 75 kW - at 300 V rated value 15 kW - at 300 V rated value 15 kW - at 400 V rated value 15 kW - at 400 V rated value 15 kW operating forgenery - - at 400 V rated value 15 kW operating operating forgenery - - at 00 V rated value 15 kW operating operating forgenery - - at 00 V rated value 0 operating operating forgenery - - at 00 V rated value 0 operating operating forgenery - - at 10 V 05 A operating for		
operating power at AC-3 at AC-3 at AC-3 at AC-3 at AD-3 at AD-4 at AD-4		
• at AC-3- at 200 V rated value5 KW- at 500 V rated value7.5 kW- at 500 V rated value15 kW- at 200 V rated value55 KW- at 200 V rated value55 KW- at 200 V rated value7.5 kW- at 200 V rated value7.5 kW- at 400 V rated value15 kW- at 400 V rated value15 kW- at 400 V rated value15 kM- at 600 V rated value16 km- at 600 V rated value16 km- at 600 V rated value16 km- at 720 V0.5 A- at 720 V rated value10 kA- at 720 V rate	· ·	
- at 200 Y relat value 55 KW - at 600 V rated value 75 KW - at 600 V rated value 15 KW - at 600 V rated value 15 KW - at 600 V rated value 55 KW - at 200 V rated value 55 KW - at 200 V rated value 55 KW - at 600 V rated value 75 KW - at 600 V rated value 15 t/h - at 600 V rated value 15 t/h - at 600 V rated value 15 t/h - at 600 V rated value 16 KW Operating frequency 1 - at 600 V rated value 10 KM - at 720 V rated value 0.0 Operational current of auxiliary contacts at AC-15 1 - at 120 V 0.5 A Operational current of auxiliary contacts at AC-15 0.5 A - at 230 V 0.5 A Operational current of auxiliary contacts at AC-15 0.5 A - at 24 W 0.5 A - at 120 V 0.5 A Protect function Value - at 240 V rated value 10 KA - at 60 V 0.5 A - at 60 V rated value 10 KA		
- at 400 Y rated value7.5 kW- at 500 Y rated value15 kW- at 230 Y rated value5.5 kW- at 400 Y rated value5.5 kW- at 400 Y rated value7.5 kW- at 400 Y rated value7.5 kW- at 600 Y rated value15 kW- at 600 Y rated value16 kW- at 600 Y rated value10 kW- at 720 Y0.5 A- at 20 Y0.5 A- at 20 Y0.5 A- at 20 Y0.5 A- at 600 Y rated value1 A- at 600 Y rated value1 A- at 600 Y rated value10 kA- at 600 Y rated value100 kA- at 600 Y rated value100 kA- at 600 Y rated value100 kA- at 600 Y rated value10 kA- at 600 Y rated value20 A- at 600 Y rated value20 A- at 600 Y rated value		5.5 kW
- at 500 V rated value11 kW- at 630 V rated value15 kW- at 230 V rated value55 kW- at 230 V rated value75 kW- at 500 V rated value75 kW- at 500 V rated value15 kWoperating frequency15 kW- at 630 V rated value15 kWoperating frequency15 kM- at 640 V rated value15 kMoperating frequency10 kM- at 640 V rated value15 kMoperating frequency1- at 640 V rated value10 kM- at 640 V rated value1- at 640 V rated value1- at 72 kW0- at 72 kW0- at 72 kW0.5 A- at 72 kW0.5		
- at 800 v rated value 15 kW - at 230 v rated value 55 kW - at 400 v rated value 75 kW - at 600 v rated value 15 kW - at 600 v rated value 10 k - at 72 v 2 A - at 72 v 2 A - at 72 v 2 A - at 72 v 0 5 A - at 72 v		
		15 kW
- at 300 V rated value7.5 kW- at 500 V rated value11 kV- at 600 V rated value15 kVoperating frequency15 t/n- at AC-3 maximum15 t/n- at AC-3 maximum15 t/n- at AC-3 e maximum15 t/n- at AC-3 e maximum15 t/n- at AC-3 e maximum10 k- at AC-3 e maximum1- at AC-3 e maximum1- at AC-3 e maximum1- at AC-3 e maximum1- at AC-3 e maximum2 A- at AC-3 e maximum contacts0- operational current of auxiliary contacts0- operational current of auxiliary contacts at AC-15 at 24 V0.5 A- at 230 V0.5 A- at 230 V0.5 A- at 230 V0.5 A- at 230 V0.5 A- operational current of auxiliary contacts at DC-13- at 80 W0.15 A- product functionN- operational current of auxiliary contacts at DC-13- at 24 V1 A- at 62 W0.15 AProtective and monitoring functions- product function- operational current of auxiliary contacts at DC-13- at 820 V rated value10 KA- at 420 V rated value100 KA- at 420 V rated value100 KA- at 420 V rated value100 KA- at 420 V rated value20 A- at 4200		
- at 680 V rated value11 kW- at 680 V rated value15 kWoperating frequency15 kW• at AC3 maximum15 1/h• at AC3 maximum15 1/h• at AC3 maximum15 1/hAuxiliary circuittenswersecleage of the auxiliary switchtenswersenumber of NG contacts for auxiliary contacts1number of NG contacts for auxiliary contacts0.0operational current of auxiliary contacts0.1• at 24 V0.5 A• at 24 V0.5 A• at 25 V0.5 A• at 26 V0.5 A• at 27 V0.5 A• at 28 V0.15 AProduct functionVes• at 24 V0.15 AProduct functionVes• at 24 V0.15 AProduct functionVes• at 24 V and total detectionVes• at 24 V and total detectionVes• product functionVes• at 24 V and value100 kA• at 24 V and value25 kA• at 24 V and value26 kA• at 240 V rated value26 kA• at 240 V rated value20 kA• at 240 V ra	— at 230 V rated value	5.5 kW
− at 690 V rated value 15 kW operating frequency 15 1/h • at AC-3e maximum 15 1/h • Auxiliary circuit 15 1/h Auxiliary circuit 1 estign of the auxiliary contacts 1 number of NC contacts for auxiliary contacts 1 operational current of auxiliary contacts 1 operational current of auxiliary contacts at AC-15 2 A • at 24 V 0.5 A • at 230 V 0.5 A • at 230 V 0.5 A • at 24 V 1 A • at 24 V 0.5 A • at 24 V 1 A • at 26 V 0.5 A • at 26 V 0.5 A • at 26 V 0.5 A • at 26 V 1 A • at 60 V 0.5 A operational current of auxiliary contacts at CI-13 • at 26 V 1 A • at 26 V 1 A • at 26 V 1 A • at 60 V rated value C	— at 400 V rated value	7.5 kW
operating frequency 15 1/h • at AC-3 maximum 15 1/h • at AC-3 maximum 15 1/h • at AC-3 maximum 15 1/h design of the auxiliary switch transverse number of NC contacts for auxiliary contacts 1 number of NC contacts for auxiliary contacts 0 operational current of auxiliary contacts at AC-15 1 • at 24 V 2 A • at 125 V 0.5 A • at 230 V 0.5 A • at 24 V 0.5 A • at 24 V 0.5 A • at 25 V 0.5 A • at 26 V 0.5 A • at 26 V 0.5 A • at 24 V 0.15 A Protective and monitoring functions 0.15 A product function Velocations • ground fault detection Velocations • pround fault detection Velocations • at AC at 500 V rated value 100 kA • at AC at 600 V rated value 100 kA • at AC at 600 V rated value 2 kA • at AC at 600 V rated value 2 kA <td>— at 500 V rated value</td> <td>11 kW</td>	— at 500 V rated value	11 kW
• at AC-3 maximum15 t/hAuxilary circuitTensversenumber of NC contacts for auxillary contacts1number of NC contacts for auxillary contacts0operational current of auxillary contacts0operational current of auxillary contacts at AC-15-1• at 24 V2A• at 25 V0.5 A• at 24 V0.5 A• at 60 V0.15 AProduct functionVes• ground fault detectionNo• ground fault detectionVes• at 60 V0.15 AProduct functionVes• at 60 V0.15 AProduct functionVes• at 60 V0.15 AProduct functionVes• at 60 V100 kA• at 60 V rated value100 kA• at 60 V rated value20 kA• at 60 V rated value	— at 690 V rated value	15 kW
• at AC-3 maximum15 t/hAuxilary circuitTensversenumber of NC contacts for auxillary contacts1number of NC contacts for auxillary contacts0operational current of auxillary contacts0operational current of auxillary contacts at AC-15-1• at 24 V2A• at 25 V0.5 A• at 24 V0.5 A• at 60 V0.15 AProduct functionVes• ground fault detectionNo• ground fault detectionVes• at 60 V0.15 AProduct functionVes• at 60 V0.15 AProduct functionVes• at 60 V0.15 AProduct functionVes• at 60 V100 kA• at 60 V rated value100 kA• at 60 V rated value20 kA• at 60 V rated value	operating frequency	
Auxiliary circuit design of the auxiliary switch transverse number of NC contacts for auxiliary contacts 1 number of C2 contacts for auxiliary contacts 0 operational current of auxiliary contacts at AC-15 0 • at 24 V 0.5 A • at 25 V 0.5 A operational current of auxiliary contacts at DC-13 0.5 A • at 20 V 0.5 A operational current of auxiliary contacts at DC-13 0.5 A • at 24 V 1 A • at 60 V 0.15 A Protective and monitoring functions Protective and monitoring functions product function Yes • ground fault detection Yes trip class CLASS 10 totak 0 v V rated value 55 kA • at AC at 600 V rated value 55 kA • at AC at 600 V rated value 10 kA • at AC at 600 V rated value 5 kA • at 240 V rated value 5 kA • at 240 V rated value 5 kA • at AC at 600 V rated value 2 kA • at AC at 600 V rated value 2 kA • at 400 V rated value 2 kA	• at AC-3 maximum	15 1/h
design of the auxiliary switch transverse number of NC contacts for auxiliary contacts 1 number of CD contacts for auxiliary contacts 1 operational current of auxiliary contacts at AC-15 0 • at 120 V 0.5 A • at 120 V 0.5 A • at 230 V 0.5 A • at 230 V 0.5 A • at 24 V 1 A • at 230 V 0.5 A • at 24 V 1 A • at 60 V 0.15 A Protective and monitoring functions No product function Yes • phase failure detection Yes • at AC at 400 V rated value 100 kA • at AC at 400 V rated value 55 kA • at AC at 400 V rated value 100 kA • at AC at 500 V rated value 100 kA • at AC at 690 V rated value 25 kA • at AC at 690 V rated value 25 kA • at AC at 400 V rated value 25 kA • at 40 V rated value 26 kA • at 600 V rated value 26 kA • at 600 V rated value 26 kA • at 600 V rated value 20 A	• at AC-3e maximum	15 1/h
number of NC contacts for auxiliary contacts 1 number of NC contacts for auxiliary contacts 1 number of NC contacts for auxiliary contacts 0 operational current of auxiliary contacts at AC-15 0 • at 24 V 2 A • at 125 V 0.5 A • at 230 V 0.5 A operational current of auxiliary contacts at DC-13 0 • at 24 V 1 A • at 60 V 1.1 A Protective and monitoring functions 0 product function No • ground fault detection Yes trip class CLASS 10 design of the overload release 100 kA breaking capacity maximum short-circuit current (icu) 10 kA • at AC at 240 V rated value 10 kA • at AC at 500 V rated value 25 kA • at AC at 630 V rated value 26 kA • at 420 V rated value 100 kA • at 420 V rated value 26 kA • at 600 V rated value 26 A	Auxiliary circuit	
number of NC contacts for auxiliary contacts 1 number of NC contacts for auxiliary contacts 1 number of NC contacts for auxiliary contacts 0 operational current of auxiliary contacts at AC-15 0 • at 24 V 2 A • at 125 V 0.5 A • at 230 V 0.5 A operational current of auxiliary contacts at DC-13 0 • at 24 V 1 A • at 60 V 1.1 A Protective and monitoring functions 0 product function No • ground fault detection Yes trip class CLASS 10 design of the overload release 100 kA breaking capacity maximum short-circuit current (icu) 10 kA • at AC at 240 V rated value 10 kA • at AC at 500 V rated value 25 kA • at AC at 630 V rated value 26 kA • at 420 V rated value 100 kA • at 420 V rated value 26 kA • at 600 V rated value 26 A	design of the auxiliary switch	transverse
number of NO contacts for auxiliary contacts 0 number of CO contacts for auxiliary contacts at AC-15 0 • at 24 V 2A • at 120 V 0.5 A • at 230 V 0.5 A • at 230 V 0.5 A • at 24 V 1A • at 26 V 0.5 A • at 24 V 0.5 A • at 24 V 0.5 A • at 24 V 0.5 A • at 26 V 0.5 A • at 60 V 0.15 A Protectfunction No • ground fault detection Yes • phase failure detection Yes • at AC at 240 V rated value 100 kA • at AC at 500 V rated value 100 kA • at AC at 500 V rated value 10 kA • at AC at 500 V rated value 100 kA • at 240 V rated value 100 kA • at 240 V rated value 25 kA • at 260 V rated value 26 A <td></td> <td>1</td>		1
number of CO contacts for auxiliary contacts at AC-15 0 operational current of auxiliary contacts at AC-15 2 A • at 120 V 0.5 A • at 125 V 0.5 A • at 230 V 0.5 A operational current of auxiliary contacts at DC-13 0.5 A • at 24 V 1 A • at 24 V 0.5 A • at 24 V 1 A • at 24 V 1 A • at 60 V 0.15 A Protective and monitoring functions product function No • ground fault detection Yes trip class CLASS 10 design of the overload release thermal breaking capacity maximum short-circuit current (icu) 100 kA • at AC at 240 V rated value 100 kA • at AC at 500 V rated value 10 kA • at AC at 500 V rated value 10 kA • at AC at 500 V rated value 10 kA • at AC at 500 V rated value 10 kA • at 240 V rated value 10 kA • at 400 V rated value 10 kA • at 240 V rated value 10 kA • at 240 V rated value 26 kA • at 400 V rated value 26 kA • at 400 V rated value 20 A • at 600 V rated value 20 A		1
operational current of auxiliary contacts at AC-15 2 A • at 120 V 0.5 A • at 125 V 0.5 A • at 230 V 0.5 A operational current of auxiliary contacts at DC-13 0.5 A • at 24 V 1 A • at 60 V 0.15 A Protective and monitoring functions product function • ground fault detection No • phase failure detection Yees thrp class CLASS 10 design of the overload release thermal breaking capacity maximum short-circuit current (Icu) 100 kA • at AC at 400 V rated value 100 kA • at AC at 500 V rated value 100 kA • at AC at 500 V rated value 4 kA breaking capacity operating short-circuit current (Icu) 4 kA • at 240 V rated value 100 kA • at 240 V rated value 2 kA • at 600 V rated value 2 kA • at 600 V rated value 2 kA		0
 at 120 V at 125 V 0.5 A at 125 V 0.5 A obs A <liobs a<="" li=""> <liobs a<="" li=""> obs A</liobs></liobs>	operational current of auxiliary contacts at AC-15	
• at 125 V0.5 A• at 220 V0.5 Aoperational current of auxiliary contacts at DC-13	• at 24 V	2 A
• at 230 V0.5 Aoperational current of auxilliary contacts at DC-13• at 24 V1 A• at 60 V0.15 AProduct function• ground fault detectionNo• phase failure detectionYestrip classCLASS 10design of the overload releasethermalbreaking capacity maximum short-circuit current (Icu)100 kA• at AC at 240 V rated value100 kA• at AC at 690 V rated value55 kA• at AC at 690 V rated value100 kA• at AC at 690 V rated value4 kAbreaking capacity operating short-circuit current (Icc) at AC4 kA• at 240 V rated value100 kA• at 240 V rated value100 kA• at 400 V rated value5 kA• at 240 V rated value100 kA• at 400 V rated value25 kA• at 600 V rated value26 A• at 600 V rated value26 A• at 600 V rated value20 A• at 600 V rated value1.5 hp• at 230 V rated value1.5 hp• at 230 V rated value3 hp• for 3-phase AC motor1.5 hp- at 200/208 V rated value3 hp	• at 120 V	0.5 A
operational current of auxiliary contacts at DC-13 at 24 V at 60 V 0.15 A Protective and monitoring functions product function ground fault detection No phase failure detection Yes trip class CLASS 10 design of the overload release thermal breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 500 V rated value at AC at 500 V rated value at AC at 500 V rated value at AC at 600 V rated value at AC at 500 V rated value at AC at 00 V rated value at AC at 00 V rated value at 400 V rated value at 600 V rated value breaking capacity operating short-circuit turp unit at 600 V rated value at 600 V rated value at 600 V rated value bit 600 V rated value bit 600 V rated value bit 600 V rated value at 600 V rated value bit 600 V rated value	• at 125 V	0.5 A
	• at 230 V	0.5 A
• at 60 V 0.15 A Protective and monitoring functions product function No • ground fault detection Yes trip class CLASS 10 design of the overload release thermal breaking capacity maximum short-circuit current (icu) 00 kA • at AC at 240 V rated value 100 kA • at AC at 500 V rated value 10 kA • at AC at 600 V rated value 100 kA • at AC at 600 V rated value 25 kA • at 4C at 600 V rated value 100 kA • at 4C at 600 V rated value 25 kA • at 600 V rated value 5 kA • at 600 V rated value 2 kA response value current of instantaneous short-circuit trip 200 A • at 400 V rated value 20 A • at 600 V rated value 20 A • at 400 V rated value 20 A • at 600 V rated value 30 A • at 600 V rated value 3 hp <t< td=""><td>operational current of auxiliary contacts at DC-13</td><td></td></t<>	operational current of auxiliary contacts at DC-13	
Protective and monitoring functions product function • ground fault detection • phase failure detection Yes trip class CLASS 10 design of the overload release thermal breaking capacity maximum short-circuit current (Icu) • at AC at 240 V rated value • at AC at 400 V rated value • at AC at 500 V rated value • at AC at 600 V rated value • at 240 V rated value • at 420 V rated value • at 600 V rated value • at 400 V rated value • at 600 V rated value • at 400 V rated value • at 600 V rated value • at 400 V rated value • at 600 V rated value • at 600 V rated value • at 400 V rated value <t< td=""><td>• at 24 V</td><td>1 A</td></t<>	• at 24 V	1 A
product function No • phase failure detection Yes trip class CLASS 10 design of the overload release thermal breaking capacity maximum short-circuit current (Icu) 00 kA • at AC at 240 V rated value 100 kA • at AC at 500 V rated value 100 kA • at AC at 500 V rated value 10 kA • at AC at 690 V rated value 10 kA • at AC at 900 V rated value 10 kA • at 240 V rated value 100 kA • at 240 V rated value 10 kA • at 240 V rated value 100 kA • at 240 V rated value 25 kA • at 240 V rated value 26 kA • at 600 V rated value 2 kA response value current of instantaneous short-circuit trip 260 A unit 20 A • at 460 V rated value 20 A • at 480 V rated value 3 hp • at 480 V rated value 3 hp	• at 60 V	0.15 A
• ground fault detectionNo• phase failure detectionYestrip classCLASS 10design of the overload releasethermalbreaking capacity maximum short-circuit current (Icu)100 kA• at AC at 240 V rated value100 kA• at AC at 500 V rated value10 kA• at AC at 600 V rated value4 kAbreaking capacity maximum short-circuit current (Icu)• at AC at 600 V rated value100 kA• at AC at 600 V rated value100 kA• at AC at 600 V rated value25 kA• at 240 V rated value25 kA• at 600 V rated value26 A• at 600 V rated value26 A• at 600 V rated value20 A• at 480 V rated value20 A• at 480 V rated value20 A• at 600 V rated value3 hp• for single-phase AC motor1.5 hp at 230 V rated value3 hp		
• phase failure detectionYestrip classCLASS 10design of the overload releasethemalbreaking capacity maximum short-circuit current (lou)1• at AC at 240 V rated value100 kA• at AC at 500 V rated value100 kA• at AC at 690 V rated value100 kA• at AC at eds V rated value100 kA• at 240 V rated value100 kA• at 240 V rated value25 kA• at 240 V rated value26 kA• at 690 V rated value20 kA• at 690 V rated value20 A• at 690 V rated value200 A• at 690 V rated value20 A• at 690 V rated value30 A• at 690 V r		
trip class CLASS 10 design of the overload release thermal breaking capacity maximum short-circuit current (Icu) 100 kA • at AC at 240 V rated value 100 kA • at AC at 500 V rated value 10 kA • at AC at 690 V rated value 10 kA • at AC at 690 V rated value 4 kA breaking capacity operating short-circuit current (Ics) 4 kA • at 240 V rated value 100 kA • at 240 V rated value 25 kA • at 240 V rated value 26 kA • at 400 V rated value 26 kA • at 690 V rated value 2 kA response value current of instantaneous short-circuit trip unit 260 A UL/CSA ratings 20 A full-load current (FLA) for 3-phase AC motor 20 A • at 600 V rated value 20 A • at 600 V rated value 20 A • at 600 V rated value 3 hp • for single-phase AC motor 1.5 hp at 110/120 V rated value 1.5 hp at 230 V rated value 3 hp	Protective and monitoring functions	
design of the overload release thermal breaking capacity maximum short-circuit current (Icu) 100 kA • at AC at 240 V rated value 100 kA • at AC at 500 V rated value 100 kA • at AC at 690 V rated value 10 kA • at AC at 690 V rated value 4 kA breaking capacity operating short-circuit current (Ics) 4 kA at 4C0 V rated value 100 kA • at 240 V rated value 25 kA • at 400 V rated value 26 kA • at 400 V rated value 26 kA • at 690 V rated value 2 kA response value current of instantaneous short-circuit trip unit 260 A UL/CSA ratings 20 A full-load current (FLA) for 3-phase AC motor 20 A • at 800 V rated value 20 A yielded mechanical performance [hp] 1.5 hp • for single-phase AC motor 1.5 hp - at 230 V rated value 3 hp • for 3-phase AC motor 3 hp	Protective and monitoring functions product function	No
breaking capacity maximum short-circuit current (Icu)• at AC at 240 V rated value100 kA• at AC at 400 V rated value55 kA• at AC at 500 V rated value10 kA• at AC at 690 V rated value4 kAbreaking capacity operating short-circuit current (Ics)100 kA• at 240 V rated value100 kA• at 240 V rated value100 kA• at 240 V rated value100 kA• at 240 V rated value25 kA• at 240 V rated value5 kA• at 240 V rated value26 kA• at 690 V rated value26 kA• at 690 V rated value20 A• at 690 V rated value20 A• at 600 V rated value20 A• at 600 V rated value20 A• at 600 V rated value20 A• at 480 V rated value20 A• at 230 V rated value3 hp• for single-phase AC motor at 230 V rated value3 hp• for 3-phase AC motor at 230 V rated value3 hp• for 3-phase AC motor at 200/208 V rated value3 hp	Protective and monitoring functions product function • ground fault detection	
• at AC at 240 V rated value100 kA• at AC at 400 V rated value55 kA• at AC at 500 V rated value10 kA• at AC at 690 V rated value4 kAbreaking capacity operating short-circuit current (Ics) at AC4 kA• at 240 V rated value100 kA• at 240 V rated value100 kA• at 240 V rated value25 kA• at 690 V rated value5 kA• at 690 V rated value2 kA• at 690 V rated value2 kAresponse value current of instantaneous short-circuit trip unit260 AUL/CSA ratings20 Afull-load current (FLA) for 3-phase AC motor • at 480 V rated value20 A• at 600 V rated value20 A• at 110/120 V rated value1.5 hp• at 230 V rated value3 hp• for 3-phase AC motor • at 230 V rated value1.5 hp• at 200/208 V rated value3 hp	Protective and monitoring functions product function • ground fault detection • phase failure detection	Yes
• at AC at 400 V rated value55 kA• at AC at 500 V rated value10 kA• at AC at 690 V rated value4 kAbreaking capacity operating short-circuit current (Ics) at AC100 kA• at 240 V rated value100 kA• at 240 V rated value25 kA• at 400 V rated value5 kA• at 690 V rated value2 kAresponse value current of instantaneous short-circuit trip unit260 AUL/CSA ratings20 Afull-load current (FLA) for 3-phase AC motor • at 480 V rated value20 Avielded mechanical performance [hp] • for single-phase AC motor • at 110/120 V rated value1.5 hp- at 230 V rated value3 hp• for 3-phase AC motor • at 230 V rated value3 hp• for 3-phase AC motor • at 200/208 V rated value7.5 hp	Protective and monitoring functions product function • ground fault detection • phase failure detection trip class	Yes CLASS 10
at AC at 500 V rated value10 kA• at AC at 690 V rated value4 kAbreaking capacity operating short-circuit current (Ics) at AC100 kA• at 240 V rated value100 kA• at 400 V rated value25 kA• at 500 V rated value5 kA• at 690 V rated value2 kAresponse value current of instantaneous short-circuit trip unit260 AUL/CSA ratingsfull-load current (FLA) for 3-phase AC motor • at 480 V rated value20 A• at 600 V rated value20 A• jielded mechanical performance [hp] • for single-phase AC motor • at 110/120 V rated value1.5 hp- at 230 V rated value3 hp• for 3-phase AC motor • at 200/208 V rated value7.5 hp	Protective and monitoring functions product function • ground fault detection • phase failure detection trip class design of the overload release	Yes CLASS 10
• at AC at 690 V rated value4 kAbreaking capacity operating short-circuit current (Ics) at AC100 kA• at 240 V rated value100 kA• at 400 V rated value25 kA• at 500 V rated value5 kA• at 690 V rated value2 kAresponse value current of instantaneous short-circuit trip unit260 AUL/CSA ratingsfull-load current (FLA) for 3-phase AC motor • at 480 V rated value20 A• at 600 V rated value20 A• jelded mechanical performance [hp] • for single-phase AC motor - at 110/120 V rated value1.5 hp- at 230 V rated value3 hp• for 3-phase AC motor - at 200/208 V rated value7.5 hp	Protective and monitoring functions product function • ground fault detection • phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu)	Yes CLASS 10 thermal
breaking capacity operating short-circuit current (Ics) at AC 100 kA • at 240 V rated value 100 kA • at 400 V rated value 25 kA • at 500 V rated value 5 kA • at 690 V rated value 2 kA response value current of instantaneous short-circuit trip unit 260 A UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value 20 A • at 600 V rated value 20 A • at 600 V rated value 20 A • at 100/120 V rated value 20 A • at 230 V rated value 3 hp • for 3-phase AC motor 3 hp • at 200/208 V rated value 7.5 hp	Protective and monitoring functions product function • ground fault detection • phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (lcu) • at AC at 240 V rated value	Yes CLASS 10 thermal 100 kA
at AC• at 240 V rated value100 kA• at 400 V rated value25 kA• at 500 V rated value5 kA• at 690 V rated value2 kAresponse value current of instantaneous short-circuit trip unit260 AUL/CSA ratingsUL/CSA ratingsfull-load current (FLA) for 3-phase AC motor• at 480 V rated value20 A• at 480 V rated value20 A• at 600 V rated value20 A• at 600 V rated value1.5 hp• for single-phase AC motor1.5 hp- at 230 V rated value3 hp• for 3-phase AC motor3 hp• for 3-phase AC motor7.5 hp	Protective and monitoring functions product function ground fault detection phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 400 V rated value	Yes CLASS 10 thermal 100 kA 55 kA
• at 400 V rated value25 kA• at 500 V rated value5 kA• at 690 V rated value2 kAresponse value current of instantaneous short-circuit trip unit260 AUL/CSA ratingsUL/CSA ratingsfull-load current (FLA) for 3-phase AC motor• at 480 V rated value20 A• at 480 V rated value20 A• at 600 V rated value20 A• at 600 V rated value10 A• at 600 V rated value20 A• at 600 V rated value20 A• at 600 V rated value3 hp• for single-phase AC motor1.5 hp- at 230 V rated value3 hp• for 3-phase AC motor3 hp• for 3-phase AC motor7.5 hp	Protective and monitoring functions product function • ground fault detection • phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu) • at AC at 240 V rated value • at AC at 400 V rated value • at AC at 500 V rated value	Yes CLASS 10 thermal 100 kA 55 kA 10 kA
 at 500 V rated value at 690 V rated value 2 kA response value current of instantaneous short-circuit trip unit 260 A 260 A 20 A at 480 V rated value 20 A at 600 V rated value 15 hp at 230 V rated value 3 hp for 3-phase AC motor at 200/208 V rated value 7.5 hp 	Protective and monitoring functions product function • ground fault detection • phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu) • at AC at 240 V rated value • at AC at 400 V rated value • at AC at 500 V rated value • at AC at 690 V rated value breaking capacity operating short-circuit current (Ics)	Yes CLASS 10 thermal 100 kA 55 kA 10 kA
• at 690 V rated value2 kAresponse value current of instantaneous short-circuit trip unit260 AUL/CSA ratingsfull-load current (FLA) for 3-phase AC motor• at 480 V rated value20 A• at 600 V rated value20 A• at 600 V rated value20 Ajelded mechanical performance [hp]-• for single-phase AC motor at 110/120 V rated value1.5 hp- at 230 V rated value3 hp• for 3-phase AC motor at 2200/208 V rated value7.5 hp	Protective and monitoring functions product function • ground fault detection • phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (lcu) • at AC at 240 V rated value • at AC at 400 V rated value • at AC at 500 V rated value • at AC at 690 V rated value breaking capacity operating short-circuit current (lcs) at AC	Yes CLASS 10 thermal 100 kA 55 kA 10 kA 4 kA
response value current of instantaneous short-circuit trip unit260 AUL/CSA ratingsfull-load current (FLA) for 3-phase AC motor• at 480 V rated value20 A• at 480 V rated value20 A• at 600 V rated value20 Ayielded mechanical performance [hp]6 for single-phase AC motor- at 110/120 V rated value1.5 hp- at 230 V rated value3 hp• for 3-phase AC motor- at 230 V rated value- at 200/208 V rated value7.5 hp	Protective and monitoring functions product function ground fault detection phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 500 V rated value at AC at 690 V rated value breaking capacity operating short-circuit current (Ics) at AC at 240 V rated value	Yes CLASS 10 thermal 100 kA 55 kA 10 kA 4 kA
unit UL/CSA ratings UL/CSA ratings full-load current (FLA) for 3-phase AC motor	Protective and monitoring functions product function • ground fault detection • phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu) • at AC at 240 V rated value • at AC at 500 V rated value • at AC at 690 V rated value • at AC at 690 V rated value breaking capacity operating short-circuit current (Ics) at AC • at 240 V rated value • at 400 V rated value	Yes CLASS 10 thermal 100 kA 55 kA 10 kA 4 kA 100 kA 25 kA
full-load current (FLA) for 3-phase AC motor• at 480 V rated value20 A• at 600 V rated value20 Ayielded mechanical performance [hp]• for single-phase AC motor- at 110/120 V rated value1.5 hp- at 230 V rated value3 hp• for 3-phase AC motor- at 200/208 V rated value7.5 hp	Protective and monitoring functions product function • ground fault detection • phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu) • at AC at 240 V rated value • at AC at 500 V rated value • at AC at 690 V rated value • at AC at 690 V rated value • at AC at 690 V rated value breaking capacity operating short-circuit current (Ics) at AC • at 240 V rated value • at 400 V rated value • at 500 V rated value	Yes CLASS 10 thermal 100 kA 55 kA 10 kA 4 kA 100 kA 25 kA 5 kA
• at 480 V rated value20 A• at 600 V rated value20 Ayielded mechanical performance [hp]-• for single-phase AC motor at 110/120 V rated value1.5 hp- at 230 V rated value3 hp• for 3-phase AC motor at 200/208 V rated value7.5 hp	Protective and monitoring functions product function • ground fault detection • phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu) • at AC at 240 V rated value • at AC at 500 V rated value • at AC at 690 V rated value • at AC at 690 V rated value breaking capacity operating short-circuit current (Ics) at AC • at 240 V rated value • at 240 V rated value • at 240 V rated value • at 690 V rated value	Yes CLASS 10 thermal 100 kA 55 kA 10 kA 4 kA 100 kA 25 kA 5 kA 2 kA
• at 600 V rated value20 A yielded mechanical performance [hp] -• for single-phase AC motor at 110/120 V rated value1.5 hp- at 230 V rated value3 hp• for 3-phase AC motor at 200/208 V rated value7.5 hp	Protective and monitoring functions product function • ground fault detection • phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (lcu) • at AC at 240 V rated value • at AC at 500 V rated value • at AC at 690 V rated value • at AC at 690 V rated value breaking capacity operating short-circuit current (lcs) at AC • at 240 V rated value • at 240 V rated value • at 400 V rated value • at 690 V rated value	Yes CLASS 10 thermal 100 kA 55 kA 10 kA 4 kA 100 kA 25 kA 5 kA 2 kA
yielded mechanical performance [hp]• for single-phase AC motor at 110/120 V rated value1.5 hp at 230 V rated value3 hp• for 3-phase AC motor at 200/208 V rated value7.5 hp	Protective and monitoring functions product function • ground fault detection • phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu) • at AC at 240 V rated value • at AC at 500 V rated value • at AC at 690 V rated value • at AC at 690 V rated value • at 240 V rated value • at 240 V rated value • at 690 V rated value • at 400 V rated value • at 690 V rated value response value current of instantaneous short-circuit trip unit UL/CSA ratings	Yes CLASS 10 thermal 100 kA 55 kA 10 kA 4 kA 100 kA 25 kA 5 kA 2 kA
 for single-phase AC motor — at 110/120 V rated value — at 230 V rated value for 3-phase AC motor — at 200/208 V rated value 7.5 hp 	Protective and monitoring functions product function • ground fault detection • phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu) • at AC at 240 V rated value • at AC at 500 V rated value • at AC at 690 V rated value • at AC at 690 V rated value breaking capacity operating short-circuit current (Ics) at AC • at 240 V rated value • at 400 V rated value • at 400 V rated value • at 690 V rated value	Yes CLASS 10 thermal 100 kA 55 kA 10 kA 4 kA 100 kA 25 kA 5 kA 260 A
	Protective and monitoring functions product function • ground fault detection • phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu) • at AC at 240 V rated value • at AC at 500 V rated value • at AC at 690 V rated value • at AC at 690 V rated value breaking capacity operating short-circuit current (Ics) at AC • at 240 V rated value • at 400 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 480 V rated value • at 480 V rated value	Yes CLASS 10 thermal 100 kA 55 kA 10 kA 4 kA 100 kA 25 kA 5 kA 260 A
 at 230 V rated value for 3-phase AC motor at 200/208 V rated value 7.5 hp 	Protective and monitoring functions product function • ground fault detection • phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu) • at AC at 240 V rated value • at AC at 500 V rated value • at AC at 690 V rated value • at AC at 690 V rated value • at AC at 690 V rated value breaking capacity operating short-circuit current (Ics) at AC • at 240 V rated value • at 400 V rated value • at 240 V rated value • at 240 V rated value • at 690 V rated value • at 400 V rated value • at 690 V rated value response value current of instantaneous short-circuit trip unit UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value	Yes CLASS 10 thermal 100 kA 55 kA 10 kA 4 kA 100 kA 25 kA 5 kA 260 A
for 3-phase AC motor — at 200/208 V rated value 7.5 hp	Protective and monitoring functions product function • ground fault detection • phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (lcu) • at AC at 240 V rated value • at AC at 500 V rated value • at AC at 690 V rated value • at AC at 690 V rated value breaking capacity operating short-circuit current (lcs) at AC • at 240 V rated value • at 500 V rated value • at 690 V rated value • at 480 V rated value • at 480 V rated value • at 600 V rated value	Yes CLASS 10 thermal 100 kA 55 kA 10 kA 4 kA 100 kA 25 kA 5 kA 260 A
- at 200/208 V rated value 7.5 hp	Protective and monitoring functions product function • ground fault detection • phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu) • at AC at 240 V rated value • at AC at 500 V rated value • at AC at 690 V rated value • at AC at 690 V rated value • at 240 V rated value • at 690 V rated value • at 600 V rated value • at 480 V rated value • at 600 V rat	Yes CLASS 10 thermal 100 kA 55 kA 10 kA 4 kA 100 kA 25 kA 5 kA 2 kA 260 A 20 A
	Protective and monitoring functions product function • ground fault detection • phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu) • at AC at 240 V rated value • at AC at 500 V rated value • at AC at 690 V rated value • at 240 V rated value • at 690 V rated value • at 600 V rated value •	Yes CLASS 10 thermal 100 kA 55 kA 10 kA 4 kA 100 kA 25 kA 5 kA 2 kA 260 A 20 A 20 A 20 A
- at 220/230 V rated value 5 bp	Protective and monitoring functions product function • ground fault detection • phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu) • at AC at 240 V rated value • at AC at 500 V rated value • at AC at 690 V rated value • at AC at 690 V rated value • at AC at 690 V rated value • at 240 V rated value • at 690 V rated value • at 600	Yes CLASS 10 thermal 100 kA 55 kA 10 kA 4 kA 100 kA 25 kA 5 kA 2 kA 260 A 20 A 20 A 20 A
	Protective and monitoring functions product function • ground fault detection • phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu) • at AC at 240 V rated value • at AC at 500 V rated value • at AC at 690 V rated value • at AC at 690 V rated value • at AC at 690 V rated value • at 240 V rated value • at 600 V rated value • at 480 V rated value • at 200 V rated value • for si	Yes CLASS 10 thermal 100 kA 55 kA 10 kA 4 kA 100 kA 25 kA 5 kA 2 kA 260 A 20 A 20 A 20 A 20 A

— at 460/480 V rated value	10 hp
contact rating of auxiliary contacts according to UL	C300 / R300
Short-circuit protection	
	Vee
product function short circuit protection	Yes
design of the short-circuit trip	magnetic
design of the fuse link	Fues al /a C: 40.4 ministrum size it breaker C.C.A /abort size it surrant
 for short-circuit protection of the auxiliary switch required 	Fuse gL/gG: 10 A, miniature circuit breaker C 6 A (short-circuit current Ik < 400 A)
design of the fuse link for IT network for short-circuit	,
protection of the main circuit	
• at 400 V	gL/gG 63 A
• at 500 V	gL/gG 50 A
• at 690 V	gL/gG 50 A
Installation/ mounting/ dimensions	
mounting position	any
fastening method	screw and snap-on mounting onto 35 mm standard mounting rail
	according to DIN EN 60715
height	97 mm
width	45 mm
depth	97 mm
required spacing	
 for grounded parts at 400 V 	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
• for live parts at 400 V	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
• for grounded parts at 500 V	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
• for live parts at 500 V	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
 for grounded parts at 690 V 	
— downwards	50 mm
— upwards	50 mm
— backwards	0 mm
— at the side	30 mm
— forwards	0 mm
• for live parts at 690 V	
— downwards	50 mm
— upwards	50 mm
— backwards	0 mm
— at the side	30 mm
— forwards	0 mm
Connections/ Terminals	
type of electrical connection	
 for main current circuit 	screw-type terminals
for auxiliary and control circuit	screw-type terminals
arrangement of electrical connectors for main current circuit	Top and bottom
type of connectable conductor cross-sections	
for main contacts	
— solid or stranded	2x (1 2.5 mm²), 2x (2.5 10 mm²)
— finely stranded with core end processing	2x (1 2.5 mm ²), 2x (2.5 6 mm ²), 1x 10 mm ²
at AWG cables for main contacts	2x (16 12), 2x (14 8)
type of connectable conductor cross-sections	
······································	

 for auxiliary cor 	ntacts				
— solid or str			2x (0.5 1.5 mm²), 2x (0	$(75 - 2.5 \text{ mm}^2)$	
	nded with core end proce	essina	2x (0.5 1.5 mm²), 2x (0		
	for auxiliary contacts	Joonig	2x (0.0 1.0 mm), 2x (0 2x (20 16), 2x (18 14		
tightening torque			ZX (20 10), 2X (10 1-	")	
	ts with screw-type termir	nale	2 25 N·m		
			2 2.5 N·m		
for auxiliary contacts with screw-type terminals design of screwdriver shaft		0.8 1.2 N·m			
size of the screwdriver tip		Diameter 5 to 6 mm			
			Pozidriv size 2		
-	l of the connection scre	ew.	N/4		
 for main contact 			M4		
-	and control contacts		M3		
Safety related data					
B10 value					
 with high dema 	nd rate according to SN	31920	5 000		
proportion of dange	rous failures				
 with low deman 	nd rate according to SN 3	1920	50 %		
 with high demain 	nd rate according to SN	31920	50 %		
failure rate [FIT]					
 with low deman 	nd rate according to SN 3	1920	50 FIT		
T1 value for proof tes	t interval or service life a	ccording to	10 y		
IEC 61508		0			
protection class IP o 60529	on the front according t	to IEC	IP20		
touch protection on	the front according to	IEC 60529	finger-safe, for vertical co	ontact from the front	
display version for sw	vitching status		Handle		
Certificates/ approval	s				
General Product Ap					
	Confirmation			KC	
			\sim		
(SP	<u></u>	(m)		<u>KC</u>	COF
(SP)	<u></u>) () ()	ሠ	<u>NC</u>	EHE
SP.	<u></u>			<u>NU</u>	EHC
					EHC
					EHC
For use in hazardou		Declaration of	of Conformity		EHC
For use in hazardou		Declaration of	of Conformity	Test Certificates	EHC
For use in hazardou				Test Certificates	EHC Type Test Certific-
For use in hazardou					Type Test Certific- ates/Test Report
For use in hazardou				Test Certificates	Type Test Certific- ates/Test Report
For use in hazardou		Declaration of UK		Test Certificates	
IECE×				Test Certificates	
IECE×				Test Certificates	
IECEx IECEx				Test Certificates	
IECE×				Test Certificates	
IECEx IECEx				Test Certificates	
IECEx IECEx				Test Certificates	
IECEx IECEx				Test Certificates	
IECEx IECEx				Test Certificates	
IECEX Marine / Shipping			EG-Konf.	Test Certificates	
IECEX Marine / Shipping	us locations		EG-Konf.	Test Certificates	
IECEX Marine / Shipping	US locations		EG-Konf.	Test Certificates	
IECEX Marine / Shipping	us locations		EG-Konf.	Test Certificates	
IECEX Marine / Shipping	US locations		EG-Konf. LRS	Test Certificates Special Test Certificates ate	
IECEX Marine / Shipping	US locations		EG-Konf.	Test Certificates	
IECEX Marine / Shipping	US locations		EG-Konf. LRS	Test Certificates Special Test Certificates ate	
IECEX Marine / Shipping	US locations		EG-Konf. LRS	Test Certificates Special Test Certificates ate	
IECEX Marine / Shipping	US locations		EG-Konf. LRS	Test Certificates Special Test Certificates ate	
IECEX Marine / Shipping	US locations		EG-Konf. LRS	Test Certificates Special Test Certificates ate	
IECEX Marine / Shipping	US locations		EG-Konf. LRS	Test Certificates Special Test Certificates ate	
IECEX Marine / Shipping	US locations		EG-Konf. LRS	Test Certificates Special Test Certificates ate	
IECEX IECEX Marine / Shipping ABS Marine / Shipping Marine / Shipping	US locations		EG-Konf. EG-Konf. Railway Confirmation	Test Certificates Special Test Certificates ate	

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RV2021-4BA15

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2021-4BA15

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2021-4BA15

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

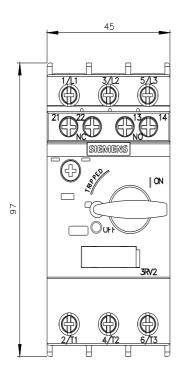
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2021-4BA15&lang=en

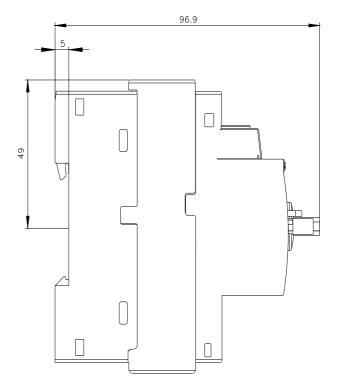
Characteristic: Tripping characteristics, I²t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RV2021-4BA15/char

Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2021-4BA15&objecttype=14&gridview=view1





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6/25/2022 🖸