## **SIEMENS**

Data sheet 3RV2311-1EC10



Circuit breaker size S00 for starter combination Rated current 4 A N release 52 A screw terminal Standard switching capacity

product designation design of the product product type designation 3RV2  General technical date size of the circuit-breaker size of contactor can be combined company-specific product yetension auxiliary switch yes power loss [W] for rated value of the current at AC in hot operating state at AC in hot operating state per pole insulation voltage with degree of polition 3 at AC rated value surge voltage resistance rated value shock resistance according to IEC 60068-2-27 go f the main contacts typical electrical endurance (switching cycles) of of the main contacts typical electrical endurance (switching cycles) typical electrical endurance (switching cycles) typical reference code according to IEC 81346-2 Qubustance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation during storage during transport elative humidity during operation  Main circuit number of poles for main current circuit operating voltage at AC-3 rated value maximum elat AC-3 rated value maximum elat AC-3 rated value maximum elat AC-3 rated value at AC-3 rated value elat	product brand name	SIRIUS
product type designation  General technical data size of the circuit-breaker Size of contactor can be combined company-specific product extension auxiliary switch yes power loss [W] for rated value of the current • at AC in hot operating state per pole 1 at AC in hot operating state per pole 1 at AC in such departs of pollution 3 at AC rated value  • at AC in hot operating state per pole 2 at W insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value 5 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 electrical endurance (switching cycles) typical electrical endurance (switching cycles) typical volume v	product designation	Circuit breaker
Second State of the circuit-breaker   S00	design of the product	For starter combinations
size of the circuit-breaker  size of contactor can be combined company-specific product extension auxiliary switch  power loss [W] for rated value of the current  • at AC in hot operating state • at AC in hot operating state per pole insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value shock resistance according to IEC 60068-2-27  mechanical service life (switching cycles) • of the main contacts typical of auxiliary contacts typical electrical endurance (switching cycles) typical plouton of auxiliary contacts typical plouton on one preference code according to IEC 81346-2 Q Substance Prohibitance (Date) plouton on one provided at height above sea level maximum ambient temperature • during operation	product type designation	3RV2
size of contactor can be combined company-specific product extension auxiliary switch  power loss [W] for rated value of the current  • at AC in hot operating state per pole  • at AC in hot operating state per pole  insulation voltage with degree of pollution 3 at AC rated value  surge voltage resistance rated value  shock resistance according to IEC 60068-2-27  • of the main contacts typical perfect of electrical electrical endurance (switching cycles)  • of the main contacts typical perfect of electrical endurance (switching cycles) (special perfect of electrical endurance (switching cycles) (special perfect of electrical endurance) (switching cycles) (special endurance) (switching cycles)	General technical data	
product extension auxiliary switch power loss [W] for rated value of the current • at AC in hot operating state • at AC in hot operating state per pole • at AC in hot operating state per pole • at AC in hot operating state per pole value  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 • of auxiliary contacts typical 100 000 electrical endurance (switching cycles) typical electrical endurance (switching cycles) typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date)  Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport -50 +80 °C relative humicity during operation  Main circuit number of poles for main current circuit operating voltage • at AC-3e rated value maximum • at AC-3e rated value maximum • at AC-3 at 400 V rated value • operational current • at AC-3 at 400 V rated value • operational current • at AC-3 at 400 V rated value • operational current • at AC-3 at 400 V rated value • at AC-3 at 400 V rated value  • at AC-3 at 400 V rated value  • at AC-3 at 400 V rated value  • at AC-3 at 400 V rated value  • at AC-3 at 400 V rated value  • at AC-3 at 400 V rated value	size of the circuit-breaker	S00
power loss [W] for rated value of the current  • at AC in hot operating state • at AC in hot operating state per pole insulation voltage with degree of pollution 3 at AC rated value  surge voltage resistance rated value  shock resistance according to IEC 60068-2-27  pof the main contacts typical • of the main contacts typical • of auxiliary contacts typical • outlong to a to	size of contactor can be combined company-specific	S00, S0
at AC in hot operating state per pole at AC in hot operating state per pole insulation voltage with degree of pollution 3 at AC rated value  surge voltage resistance rated value shock resistance according to IEC 60068-2-27 25g / 11 ms mechanical service life (switching cycles)  of the main contacts typical of the main contacts typical of auxiliary contacts typical lelectrical endurance (switching cycles) typical electrical endurance (switching cycles) typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date)  Ambient conditions installation altitude at height above sea level maximum ambient temperature of during operation of during storage of during transport relative humidity during operation  Main circuit  number of poles for main current circuit operating voltage rated value at AC-3 rated value maximum operational current rated value operational current of at AC-3 at 400 V rated value  operational current of AC-3 at 400 V rated value operational current of AC-3 at 400 V rated value	product extension auxiliary switch	Yes
at AC in hot operating state per pole insulation voltage with degree of pollution 3 at AC rated value  surge voltage resistance rated value shock resistance according to IEC 60068-2-27  mechanical service life (switching cycles) of the main contacts typical of auxiliary contacts typical leactrical endurance (switching cycles) typical plot on our preference code according to IEC 81346-2  Substance Prohibitance (Date)  Ambient conditions installation altitude at height above sea level maximum ambient temperature olduring operation olduring storage olduring transport relative humidity during operation  Main circuit number of poles for main current circuit operating voltage art at AC-3 rated value maximum operational current rated value operational current ot AC-3 at 400 V rated value  operational current ot AC-3 at 400 V rated value  operational current ot AC-3 at 400 V rated value  operational current  ot AC-3 at 400 V rated value  ot AC-3 at 400 V rated value  other with a AC-3 at 400 V rated value other AC-3 at 400 V rated value  other AC-3 at 400 V rated value other AC-3 at 400 V rated value other AC-3 at 400 V rated value other AC-3 at 400 V rated value other AC-3 at 400 V rated value other AC-3 at 400 V rated value	power loss [W] for rated value of the current	
insulation voltage with degree of pollution 3 at AC rated value  surge voltage resistance rated value  shock resistance according to IEC 60068-2-27  mechanical service life (switching cycles)  of the main contacts typical  of auxiliary contacts typical  ledetrical endurance (switching cycles) typical  reference code according to IEC 81346-2  Q Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature  of during operation  of during storage  of during transport  relative humidity during operation  mumber of poles for main current circuit  operating voltage  orated value  at AC-3a rated value maximum  operating frequency rated value  operational current  of AC-3 at 400 V rated value  operational current  of AC-3 at 400 V rated value  operational current  of AC-3 at 400 V rated value  operational current  of AC-3 at 400 V rated value  operational current  of AC-3 at 400 V rated value  operational current  of AC-3 at 400 V rated value  operational current  of AC-3 at 400 V rated value  operational current  of AC-3 at 400 V rated value  operational current  of AC-3 at 400 V rated value  operational current  of AC-3 at 400 V value value  operational current  of AC-3 at 400 V value value  operational current  of AC-3 at 400 V value value  operational current  of AC-3 at 400 V value  operational current  of AC-3 at 400 V value  operational current  of AC-3 at 400 V value  operational current  o	<ul> <li>at AC in hot operating state</li> </ul>	7.25 W
value  surge voltage resistance rated value shock resistance according to IEC 60068-2-27 mechanical service life (switching cycles)  of the main contacts typical of auxiliary contacts typical electrical endurance (switching cycles) typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date)  Ambient conditions installation altitude at height above sea level maximum ambient temperature of during operation during storage of during transport relative humidity during operation  Main circuit number of poles for main current circuit operating voltage orated value at AC-3 rated value maximum operating frequency rated value operational current of AA operational current rated value operational current rated value operational current of AA operational current of AA operational current rated value operational current of AA	<ul> <li>at AC in hot operating state per pole</li> </ul>	2.4 W
shock resistance according to IEC 60068-2-27  mechanical service life (switching cycles)  of the main contacts typical of auxiliary contacts typical electrical endurance (switching cycles) typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date)  Ambient conditions installation altitude at height above sea level maximum ambient temperature of during operation of during storage of during transport relative humidity during operation  mumber of poles for main current circuit operating voltage or rated value ot at AC-3 rated value maximum operation at AC-3 at 400 V rated value operational current of the main current value operational current of the main current value operational current of AA  AA  100 000  100 00	o o i	690 V
mechanical service life (switching cycles)  • of the main contacts typical • of auxiliary contacts typical lou 000 electrical endurance (switching cycles) typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date)  Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during storage • during transport relative humidity during operation  Main circuit number of poles for main current circuit operating voltage • rated value • at AC-3 rated value maximum • at AC-3 ar tated value operational current • at AC-3 at 400 V rated value • at AC-3 at 400 V rated value • at AC-3 at 400 V rated value • at AC-3 ar 400 V rated value • at AC-3 ar valed value • at AC-3 at 400 V rated value • at AC-3 ar valed value • at AC-3 at 400 V rated value • at AC-3 ar valed value • at AC-3 at 400 V rated value • at AC-3 ar valed value	surge voltage resistance rated value	6 kV
of the main contacts typical     of auxiliary contacts typical     electrical endurance (switching cycles) typical     reference code according to IEC 81346-2     Substance Prohibitance (Date)  Ambient conditions     installation altitude at height above sea level maximum     ambient temperature     ouring operation     ouring storage     ouring transport     relative humidity during operation      mumber of poles for main current circuit     operating voltage	shock resistance according to IEC 60068-2-27	25g / 11 ms
of auxiliary contacts typical electrical endurance (switching cycles) typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date)  Ambient conditions installation altitude at height above sea level maximum ambient temperature     ouring operation     during storage     during transport relative humidity during operation  Main circuit  number of poles for main current circuit operating voltage	mechanical service life (switching cycles)	
electrical endurance (switching cycles) typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date)  Ambient conditions installation altitude at height above sea level maximum  ambient temperature • during operation • during storage • during transport relative humidity during operation  10 95 %  Main circuit number of poles for main current circuit operating voltage • at AC-3 rated value maximum 690 V operating frequency rated value operational current • at AC-3 at 400 V rated value  • at AC-3 at 400 V rated value  • at AC-3 at 400 V rated value  • at AC-3 at 400 V rated value  • at AC-3 at 400 V rated value  • at AC-3 at 400 V rated value  • at AC-3 at 400 V rated value  • at AC-3 at 400 V rated value  • at AC-3 at 400 V rated value  • at AC-3 at 400 V rated value  • at AC-3 at 400 V rated value  • at AC-3 at 400 V rated value  • at AC-3 at 400 V rated value  • at AC-3 at 400 V rated value  • at AC-3 at 400 V rated value	<ul> <li>of the main contacts typical</li> </ul>	100 000
reference code according to IEC 81346-2  Substance Prohibitance (Date)  Ambient conditions installation altitude at height above sea level maximum  ambient temperature  • during operation • during storage • during transport relative humidity during operation  10 95 %  Main circuit  number of poles for main current circuit  • at AC-3 rated value maximum  operating frequency rated value  • at AC-3 at 400 V rated value • at AC-3 at 400 V rated value • at AC-3 at 400 V rated value • at AC-3 at 400 V rated value • at AC-3 at 400 V rated value • at AC-3 at 400 V rated value • at AC-3 at 400 V rated value • at AC-3 at 400 V rated value  4 A	of auxiliary contacts typical	100 000
Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature  • during operation • during storage • during transport  relative humidity during operation  10 95 %  Main circuit  number of poles for main current circuit  operating voltage • rated value • at AC-3 rated value maximum  operating frequency rated value  operational current rated value  operational current rated value  4 A  operational current • at AC-3 at 400 V rated value  4 A	electrical endurance (switching cycles) typical	100 000
installation altitude at height above sea level maximum  ambient temperature  • during operation • during storage • during transport relative humidity during operation  10 95 %  Main circuit number of poles for main current circuit operating voltage • rated value • at AC-3 rated value maximum operating frequency rated value  operating levels at AC-3 at 400 V rated value • at AC-3 at 400 V rated value  4 A	reference code according to IEC 81346-2	Q
installation altitude at height above sea level maximum  ambient temperature  • during operation • during storage • during transport • during transport  relative humidity during operation  Main circuit  number of poles for main current circuit  operating voltage • rated value • at AC-3 rated value maximum • at AC-3e rated value  operational current rated value  operational current rated value  4 A  operational current • at AC-3 at 400 V rated value  4 A	Substance Prohibitance (Date)	10/01/2009
ambient temperature  • during operation  • during storage  • during transport  relative humidity during operation  Main circuit  number of poles for main current circuit  operating voltage  • rated value  • at AC-3 rated value maximum  operating frequency rated value  operational current rated value  operational current  4 A  operational current  • at AC-3 at 400 V rated value  4 A	Ambient conditions	
<ul> <li>during operation</li> <li>during storage</li> <li>during transport</li> <li>50 +80 °C</li> <li>relative humidity during operation</li> <li>10 95 %</li> </ul> Main circuit <ul> <li>number of poles for main current circuit</li> <li>operating voltage</li> <li>rated value</li> <li>at AC-3 rated value maximum</li> <li>at AC-3e rated value maximum</li> <li>operating frequency rated value</li> <li>operational current rated value</li> <li>at AC-3 at 400 V rated value</li> <li>4 A</li> </ul>	installation altitude at height above sea level maximum	2 000 m
<ul> <li>during storage</li> <li>during transport</li> <li>-50 +80 °C</li> <li>relative humidity during operation</li> <li>10 95 %</li> </ul> Main circuit <ul> <li>number of poles for main current circuit</li> <li>operating voltage</li> <li>rated value</li> <li>at AC-3 rated value maximum</li> <li>eat AC-3e rated value maximum</li> <li>operating frequency rated value</li> <li>operational current rated value</li> <li>at AC-3 at 400 V rated value</li> </ul> 4 A operational current <ul> <li>at AC-3 at 400 V rated value</li> <li>4 A</li> </ul>	ambient temperature	
<ul> <li>◆ during transport</li> <li>relative humidity during operation</li> <li>10 95 %</li> </ul> Main circuit <ul> <li>number of poles for main current circuit</li> <li>operating voltage</li> <li>• rated value</li> <li>• at AC-3 rated value maximum</li> <li>• at AC-3e rated value maximum</li> <li>operating frequency rated value</li> <li>operational current rated value</li> <li>operational current</li> <li>• at AC-3 at 400 V rated value</li> </ul> 4 A Operational current <ul> <li>• at AC-3 at 400 V rated value</li> <li>4 A</li> </ul>	<ul> <li>during operation</li> </ul>	-20 +60 °C
relative humidity during operation  10 95 %  Main circuit  number of poles for main current circuit 3  operating voltage  • rated value • rated value maximum 690 V  • at AC-3 rated value maximum 690 V  operating frequency rated value 50 60 Hz  operational current rated value 4 A  operational current • at AC-3 at 400 V rated value 4 A	<ul> <li>during storage</li> </ul>	-50 +80 °C
Main circuit         number of poles for main current circuit       3         operating voltage       20 690 V         • rated value       20 690 V         • at AC-3 rated value maximum       690 V         operating frequency rated value       50 60 Hz         operational current rated value       4 A         operational current       4 A	during transport	-50 +80 °C
number of poles for main current circuit  operating voltage  orated value otal AC-3 rated value maximum otal AC-3e rated value maximum operating frequency rated value operational current rated value operational current otal AC-3 at 400 V rated value  3 20 690 V 690 V 690 V 690 V 690 V 4 A	relative humidity during operation	10 95 %
operating voltage  • rated value  • rated value maximum  • at AC-3 rated value maximum  690 V  operating frequency rated value  operational current rated value  • at AC-3 at 400 V rated value  4 A	Main circuit	
<ul> <li>rated value</li> <li>at AC-3 rated value maximum</li> <li>690 V</li> <li>at AC-3e rated value maximum</li> <li>690 V</li> <li>operating frequency rated value</li> <li>operational current rated value</li> <li>operational current</li> <li>at AC-3 at 400 V rated value</li> <li>4 A</li> </ul>	number of poles for main current circuit	3
<ul> <li>at AC-3 rated value maximum</li> <li>at AC-3e rated value maximum</li> <li>690 V</li> <li>operating frequency rated value</li> <li>operational current rated value</li> <li>operational current</li> <li>at AC-3 at 400 V rated value</li> <li>4 A</li> </ul>	operating voltage	
<ul> <li>at AC-3e rated value maximum</li> <li>690 V</li> <li>operating frequency rated value</li> <li>operational current rated value</li> <li>operational current</li> <li>at AC-3 at 400 V rated value</li> <li>4 A</li> </ul>	<ul> <li>rated value</li> </ul>	20 690 V
operating frequency rated value  operational current rated value  operational current  operational current  4 A  4 A	<ul> <li>at AC-3 rated value maximum</li> </ul>	690 V
operational current rated value 4 A operational current  • at AC-3 at 400 V rated value 4 A	at AC-3e rated value maximum	690 V
operational current  ◆ at AC-3 at 400 V rated value 4 A	operating frequency rated value	50 60 Hz
• at AC-3 at 400 V rated value 4 A	operational current rated value	4 A
	operational current	
	• at AC-3 at 400 V rated value	4 A
• at AC-3e at 400 V rated value 4 A	• at AC-3e at 400 V rated value	4 A

operating power	
• at AC-3	
— at 230 V rated value	0.8 kW
— at 400 V rated value	1.5 kW
— at 500 V rated value	2.2 kW
— at 690 V rated value	3 kW
• at AC-3e	
— at 230 V rated value	0.8 kW
— at 400 V rated value	1.5 kW
— at 500 V rated value	2.2 kW
— at 690 V rated value	3 kW
operating frequency	
<ul> <li>at AC-3 maximum</li> </ul>	15 1/h
<ul> <li>at AC-3e maximum</li> </ul>	15 1/h
Auxiliary circuit	
number of NC contacts for auxiliary contacts	0
number of NO contacts for auxiliary contacts	0
number of CO contacts for auxiliary contacts	0
Protective and monitoring functions	
product function	
ground fault detection	No
phase failure detection	No
breaking capacity maximum short-circuit current (Icu)	
• at AC at 240 V rated value	100 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	6 kA
breaking capacity operating short-circuit current (Ics)	Olivi
at AC	
at 240 V rated value	100 kA
at 400 V rated value	100 kA
at 500 V rated value	100 kA
at 690 V rated value	4 kA
response value current of instantaneous short-circuit trip unit	52 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
at 480 V rated value	4 A
at 600 V rated value	4 A
yielded mechanical performance [hp]	
• for single-phase AC motor	
— at 110/120 V rated value	0.13 hp
— at 230 V rated value	0.33 hp
• for 3-phase AC motor	
— at 200/208 V rated value	0.8 hp
— at 220/230 V rated value	0.75 hp
— at 460/480 V rated value	2 hp
— at 575/600 V rated value	3 hp
Short-circuit protection	
product function short circuit protection	Yes
design of the short-circuit trip	magnetic
design of the fuse link for IT network for short-circuit protection of the main circuit	inagricalo
• at 400 V	gL/gG 32 A
• at 500 V	gL/gG 32 A
• at 690 V	gL/gG 25 A
Installation/ mounting/ dimensions	3-3-2-1
	any
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	97 111111
<ul><li>for grounded parts at 400 V</li><li>— downwards</li></ul>	30 mm
— upwards	30 mm
— at the side	9 mm
• for live parts at 400 V	9 111111
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
for grounded parts at 500 V	9 111111
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
for live parts at 500 V	9 111111
— downwards	30 mm
— upwards — upwards	30 mm
— upwards — at the side	9 mm
	<b>7</b> 111111
<ul><li>for grounded parts at 690 V</li><li>— downwards</li></ul>	50 mm
	50 mm
— upwards — backwards	0 mm
	30 mm
— at the side — forwards	0 mm
for live parts at 690 V	O IIIIII
·	50 mm
— downwards	50 mm
— upwards — backwards	0 mm
— at the side	30 mm
— at the side — forwards	0 mm
Connections/ Terminals	Ollilli
type of electrical connection	
for main current 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 (0,75 2,5 mm²), 2x 4 mm²
finely stranded with core end processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
at AWG cables for main contacts	2x (18 14), 2x 12
tightening torque	
for main contacts with screw-type terminals	0.8 1.2 N·m
design of screwdriver shaft	Diameter 5 to 6 mm
size of the screwdriver tip	Pozidriv size 2
design of the thread of the connection screw	
for main contacts	M3
Safety related data	
B10 value	
with high demand rate according to SN 31920	5 000
proportion of dangerous failures	
with low demand rate according to SN 31920	50 %
with high demand rate according to SN 31920	50 %
failure rate [FIT]	
with low demand rate according to SN 31920	50 FIT
T1 value for proof test interval or service life according to	10 y
IEC 61508	
protection class IP on the front according to IEC	IP20
	IP20 finger-safe, for vertical contact from the front

display version for switching status

Handle

Certificates/ approvals

## **General Product Approval**

Declaration of Conformity



Confirmation









Declaration of Conformity

**Test Certificates** 

Marine / Shipping

Type Test Certificates/Test Report

Special Test Certificate







Marine / Shipping

other









Confirmation



Railway

Confirmation Vibration and Shock

## **Further information**

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=3RV2311-1EC10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2311-1EC10

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2311-1EC10

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

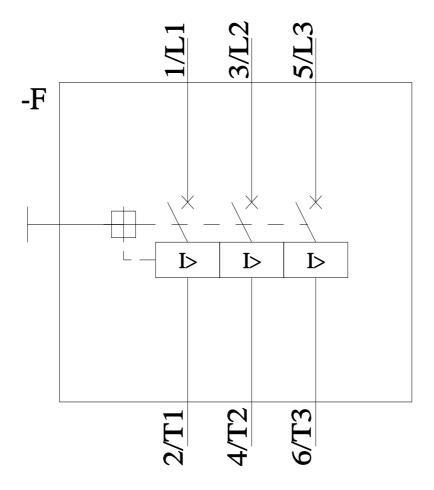
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV2311-1EC10&lang=en

Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RV2311-1EC10/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2311-1EC10&objecttype=14&gridview=view1



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