Data sheet 3RA2317-8XB30-1AK6

SIRIUS

reversing contactor assembly, AC-3e/AC-3, 12 A, 5.5 kW / 400 V, 3-pole, 110 V AC, 50 Hz / 120 V, 60 Hz, screw terminal, electrical and mechanical interlock



product brand name	SINIOS
product designation	Reversing contactor assembly
product type designation	3RA23
manufacturer's article number	
• 1 of the supplied contactor	3RT2017-1AK62
2 of the supplied contactor	3RT2017-1AK62
<ul> <li>of the supplied RH assembly kit</li> </ul>	3RA2913-2AA1
General technical data	
size of contactor	S00
product extension auxiliary switch	Yes
shock resistance at rectangular impulse	
• at AC	7,3g / 5 ms, 4,7g / 10 ms
• at DC	7.3g / 5 ms, 4.7g / 10 ms
shock resistance with sine pulse	
• at AC	11,4g / 5 ms, 7,3g / 10 ms
• at DC	11,4g / 5 ms, 7,3g / 10 ms
mechanical service life (operating cycles)	
of contactor typical	10 000 000
of the contactor with added auxiliary switch block typical	10 000 000
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	-25 +60 °C
during storage	-55 +80 °C
Main circuit	
number of poles for main current circuit	3
number of NO contacts for main contacts	3
number of NC contacts for main contacts	0
operating voltage	
<ul> <li>at AC-3 rated value maximum</li> </ul>	690 V
• at AC-3e rated value maximum	690 V
operational current	
• at AC-3	
— at 400 V rated value	12 A
— at 500 V rated value	9.2 A
— at 690 V rated value	6.7 A
• at AC-3e	
— at 400 V rated value	12 A

— at 500 V rated value	9.2 A
— at 690 V rated value	6.7 A
operating power	
• at AC-3	
— at 400 V rated value	5.5 kW
— at 500 V rated value	5.5 kW
— at 690 V rated value	5.5 kW
• at AC-3e	
— at 400 V rated value	5.5 kW
— at 690 V rated value	5.5 kW
<ul> <li>at AC-4 at 400 V rated value</li> </ul>	4 kW
operating frequency	
at AC-3 maximum	750 1/h
at AC-3e maximum	750 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	AC
control supply voltage 1 at AC	
• at 50 Hz rated value	110 V
• at 60 Hz rated value	120 V
operating range factor control supply voltage rated value of	
magnet coil at AC	
• at 50 Hz	0.8 1.1
• at 60 Hz	0.85 1.1
apparent pick-up power of magnet coil at AC	
● at 50 Hz	37 VA
inductive power factor with closing power of the coil	
● at 50 Hz	0.8
apparent holding power of magnet coil at AC	
● at 50 Hz	5.7 VA
inductive power factor with the holding power of the coil	
-+ 50 11-	0.28
● at 50 Hz	0.20
• at 50 HZ Auxiliary circuit	0.20
	< 1 error per 100 million operating cycles
Auxiliary circuit	
Auxiliary circuit contact reliability of auxiliary contacts	
Auxiliary circuit  contact reliability of auxiliary contacts  UL/CSA ratings	
Auxiliary circuit  contact reliability of auxiliary contacts  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor	< 1 error per 100 million operating cycles
Auxiliary circuit  contact reliability of auxiliary contacts  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value	< 1 error per 100 million operating cycles  11 A
Auxiliary circuit  contact reliability of auxiliary contacts  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value	< 1 error per 100 million operating cycles  11 A
Auxiliary circuit  contact reliability of auxiliary contacts  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  yielded mechanical performance [hp] for 3-phase AC motor	< 1 error per 100 million operating cycles  11 A 11 A
Auxiliary circuit  contact reliability of auxiliary contacts  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  yielded mechanical performance [hp] for 3-phase AC motor  • at 200/208 V rated value	< 1 error per 100 million operating cycles  11 A 11 A 1.5 hp
Auxiliary circuit  contact reliability of auxiliary contacts  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  yielded mechanical performance [hp] for 3-phase AC motor  • at 200/208 V rated value  • at 220/230 V rated value	< 1 error per 100 million operating cycles  11 A 11 A 1.5 hp 3 hp 7.5 hp
Auxiliary circuit contact reliability of auxiliary contacts  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value • at 600 V rated value  yielded mechanical performance [hp] for 3-phase AC motor  • at 200/208 V rated value • at 220/230 V rated value • at 460/480 V rated value • at 575/600 V rated value	< 1 error per 100 million operating cycles  11 A  11 A  1.5 hp 3 hp
Auxiliary circuit  contact reliability of auxiliary contacts  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  yielded mechanical performance [hp] for 3-phase AC motor  • at 200/208 V rated value  • at 220/230 V rated value  • at 460/480 V rated value  • at 575/600 V rated value  contact rating of auxiliary contacts according to UL	< 1 error per 100 million operating cycles 11 A 11 A 11 A 1.5 hp 3 hp 7.5 hp 10 hp
Auxiliary circuit  contact reliability of auxiliary contacts  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  yielded mechanical performance [hp] for 3-phase AC motor  • at 200/208 V rated value  • at 220/230 V rated value  • at 460/480 V rated value  • at 575/600 V rated value  contact rating of auxiliary contacts according to UL  Short-circuit protection	< 1 error per 100 million operating cycles 11 A 11 A 11 A 1.5 hp 3 hp 7.5 hp 10 hp
Auxiliary circuit  contact reliability of auxiliary contacts  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  yielded mechanical performance [hp] for 3-phase AC motor  • at 200/208 V rated value  • at 220/230 V rated value  • at 460/480 V rated value  • at 575/600 V rated value  contact rating of auxiliary contacts according to UL  Short-circuit protection  design of the fuse link	< 1 error per 100 million operating cycles 11 A 11 A 11 A 1.5 hp 3 hp 7.5 hp 10 hp
Auxiliary circuit contact reliability of auxiliary contacts  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value • at 600 V rated value  yielded mechanical performance [hp] for 3-phase AC motor • at 200/208 V rated value • at 220/230 V rated value • at 460/480 V rated value • at 575/600 V rated value  contact rating of auxiliary contacts according to UL  Short-circuit protection  design of the fuse link • for short-circuit protection of the main circuit	< 1 error per 100 million operating cycles 11 A 11 A 1.5 hp 3 hp 7.5 hp 10 hp A600 / Q600
Auxiliary circuit  contact reliability of auxiliary contacts  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  yielded mechanical performance [hp] for 3-phase AC motor  • at 200/208 V rated value  • at 220/230 V rated value  • at 460/480 V rated value  • at 575/600 V rated value  contact rating of auxiliary contacts according to UL  Short-circuit protection  design of the fuse link  • for short-circuit protection of the main circuit  — with type of coordination 1 required	< 1 error per 100 million operating cycles 11 A 11 A 1.5 hp 3 hp 7.5 hp 10 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 50 A
Auxiliary circuit  contact reliability of auxiliary contacts  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value • at 600 V rated value  yielded mechanical performance [hp] for 3-phase AC motor • at 200/208 V rated value • at 220/230 V rated value • at 460/480 V rated value • at 575/600 V rated value  contact rating of auxiliary contacts according to UL  Short-circuit protection  design of the fuse link • for short-circuit protection of the main circuit  — with type of coordination 1 required  — with type of assignment 2 required	< 1 error per 100 million operating cycles 11 A 11 A 1.5 hp 3 hp 7.5 hp 10 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 50 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 25 A
Auxiliary circuit  contact reliability of auxiliary contacts  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value • at 600 V rated value  yielded mechanical performance [hp] for 3-phase AC motor • at 200/208 V rated value • at 220/230 V rated value • at 460/480 V rated value • at 575/600 V rated value  contact rating of auxiliary contacts according to UL  Short-circuit protection  design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required	< 1 error per 100 million operating cycles 11 A 11 A 1.5 hp 3 hp 7.5 hp 10 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 50 A
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Auxiliary circuit  contact reliability of auxiliary contacts  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value • at 600 V rated value  yielded mechanical performance [hp] for 3-phase AC motor • at 200/208 V rated value • at 220/230 V rated value • at 460/480 V rated value • at 575/600 V rated value  contact rating of auxiliary contacts according to UL  Short-circuit protection  design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required	< 1 error per 100 million operating cycles 11 A 11 A 1.5 hp 3 hp 7.5 hp 10 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 50 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 25 A fuse gG: 10 A +/-180° rotation possible on vertical mounting surface; can be tilted forward and
Auxiliary circuit contact reliability of auxiliary contacts  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value • at 600 V rated value  yielded mechanical performance [hp] for 3-phase AC motor • at 200/208 V rated value • at 220/230 V rated value • at 460/480 V rated value • at 575/600 V rated value  contact rating of auxiliary contacts according to UL  Short-circuit protection  design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions	< 1 error per 100 million operating cycles 11 A 11 A 1.5 hp 3 hp 7.5 hp 10 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 50 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 25 A fuse gG: 10 A
Auxiliary circuit contact reliability of auxiliary contacts  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value • at 600 V rated value  yielded mechanical performance [hp] for 3-phase AC motor • at 200/208 V rated value • at 220/230 V rated value • at 460/480 V rated value • at 575/600 V rated value  contact rating of auxiliary contacts according to UL  Short-circuit protection  design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions mounting position	< 1 error per 100 million operating cycles 11 A 11 A 1.5 hp 3 hp 7.5 hp 10 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 50 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 25 A fuse gG: 10 A +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
Auxiliary circuit contact reliability of auxiliary contacts  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor	4 1 error per 100 million operating cycles 11 A 1.5 hp 3 hp 7.5 hp 10 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 50 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 25 A fuse gG: 10 A +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm DIN rail
Auxiliary circuit  contact reliability of auxiliary contacts  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value • at 600 V rated value  yielded mechanical performance [hp] for 3-phase AC motor • at 200/208 V rated value • at 220/230 V rated value • at 460/480 V rated value • at 575/600 V rated value  contact rating of auxiliary contacts according to UL  Short-circuit protection  design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions  mounting position  fastening method height width	4 1 error per 100 million operating cycles 11 A 1.5 hp 3 hp 7.5 hp 10 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 50 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 25 A fuse gG: 10 A +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm DIN rail 68 mm
Auxiliary circuit  contact reliability of auxiliary contacts  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value • at 600 V rated value  yielded mechanical performance [hp] for 3-phase AC motor • at 200/208 V rated value • at 220/230 V rated value • at 460/480 V rated value • at 575/600 V rated value  contact rating of auxiliary contacts according to UL  Short-circuit protection  design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth	< 1 error per 100 million operating cycles 11 A 1.5 hp 3 hp 7.5 hp 10 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 50 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 25 A fuse gG: 10 A +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm DIN rail 68 mm 90 mm
Auxiliary circuit contact reliability of auxiliary contacts  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor	< 1 error per 100 million operating cycles 11 A 1.5 hp 3 hp 7.5 hp 10 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 50 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 25 A fuse gG: 10 A +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm DIN rail 68 mm 90 mm
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Auxiliary circuit contact reliability of auxiliary contacts  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value • at 600 V rated value  yielded mechanical performance [hp] for 3-phase AC motor  • at 220/208 V rated value • at 220/230 V rated value • at 460/480 V rated value • at 575/600 V rated value  contact rating of auxiliary contacts according to UL  Short-circuit protection  design of the fuse link • for short-circuit protection of the main circuit — with type of assignment 2 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions  mounting position  fastening method height width depth required spacing • with side-by-side mounting — forwards	<1 error per 100 million operating cycles 11 A 1.5 hp 3 hp 7.5 hp 10 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 50 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 25 A fuse gG: 10 A +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm DIN rail 68 mm 90 mm 73 mm 6 mm
Auxiliary circuit contact reliability of auxiliary contacts  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor	<1 error per 100 million operating cycles 11 A 1.5 hp 3 hp 7.5 hp 10 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 50 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 25 A fuse gG: 10 A +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm DIN rail 68 mm 90 mm 73 mm

downwardo	6 mm
— downwards	
— at the side	6 mm
for grounded parts	
— forwards	6 mm
— backwards	0 mm
— upwards	6 mm
— at the side	6 mm
— downwards	6 mm
• for live parts	
— forwards	6 mm
— backwards	0 mm
— upwards	6 mm
— downwards	6 mm
— at the side	6 mm
Connections/ Terminals	
type of electrical connection	
<ul> <li>for main current circuit</li> </ul>	screw-type terminals
<ul> <li>for auxiliary and control circuit</li> </ul>	screw-type terminals
<ul> <li>at contactor for auxiliary contacts</li> </ul>	Screw-type terminals
of magnet coil	Screw-type terminals
type of connectable conductor cross-sections for main contacts	
• solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²
<ul> <li>solid or stranded</li> </ul>	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), 2x (0,5 4 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
type of connectable conductor cross-sections	
<ul> <li>for auxiliary contacts</li> </ul>	
<ul><li>— solid or stranded</li></ul>	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
<ul> <li>for AWG cables for auxiliary contacts</li> </ul>	2x (20 16), 2x (18 14)
Safety related data	
B10 value with high demand rate according to SN 31920	1 000 000
proportion of dangerous failures	
<ul> <li>with low demand rate according to SN 31920</li> </ul>	40 %
with high demand rate according to SN 31920	75 %
failure rate [FIT] with low demand rate according to SN 31920	100 FIT
T1 value for proof test interval or service life according to IEC 61508	20 a
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
Communication/ Protocol	
product function bus communication	Yes
protocol is supported AS-Interface protocol	No
product function control circuit interface with IO link	No
Certificates/ approvals	
General Product Approval	Declaration of Conformity



Confirmation









**Test Certificates** 

Marine / Shipping

Special Test Certificate

Type Test Certificates/Test Report









Marine / Shipping

other

Railway







## **Further information**

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

## Information on the packaging

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

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

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RA2317-8XB30-1AK6

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2317-8XB30-1AK6

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2317-8XB30-1AK6

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

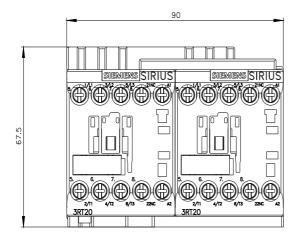
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA2317-8XB30-1AK6&lang=en

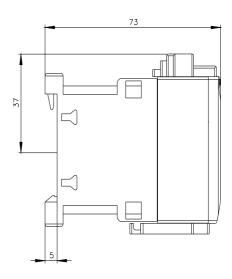
Characteristic: Tripping characteristics, I2t, Let-through current

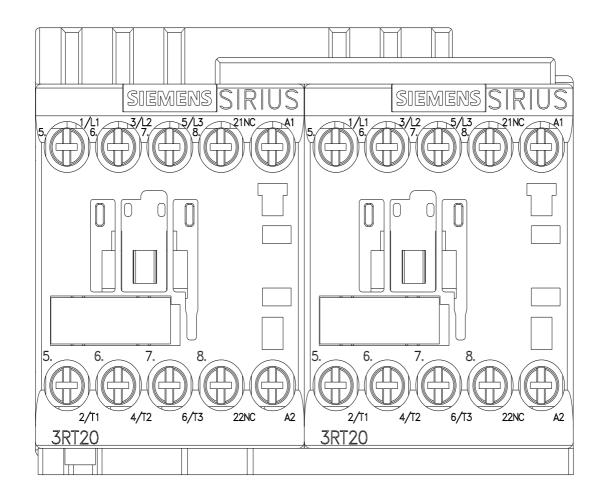
https://support.industry.siemens.com/cs/ww/en/ps/3RA2317-8XB30-1AK6/char

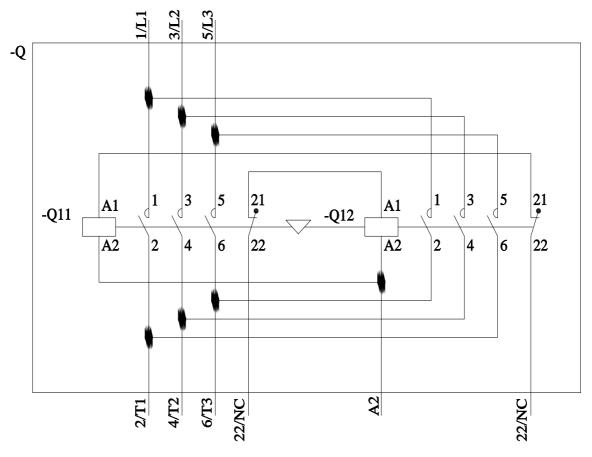
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2317-8XB30-1AK6&objecttype=14&gridview=view1









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