## **SIEMENS**

## **Data sheet**

## 3RA2110-1HA15-1AP6



Fuseless motor starter Direct start 600VAC Size S00 5.5-8Amp 220/240VAC 50/60HZ screw connection For screw mounting Or 35 mm rail-mounting Type of coordination 1 1NO (contactor)

product designation  design of the product  manufacturer's article number  of the supplied contactor of the supplied circuit-breakers of the supplied link module  General technical data  size of the circuit-breaker  size of load feeder product extension auxiliary switch insulation voltage with degree of pollution 3 at AC rated value  degree of pollution surge voltage resistance according to IEC 60068-2-27 mechanical service life (switching cycles) of contactor typical  type of assignment  Ambient conditions  ambient temperature oduring operation design of the product extension auxiliary switch shock resistance according to IEC 60068-2-27 design of pollution surge voltage resistance rated value shock resistance according to IEC 60068-2-27 design of pollution surge voltage resistance according to IEC 60068-2-27 design of pollution shock resistance according to IEC 60068-2-27 design of pollution surge voltage resistance according to IEC 60068-2-27 design of pollution shock resistance according to IEC 60068-2-27 design of pollution shock resistance according to IEC 60068-2-27 design of pollution shock resistance according to IEC 60068-2-27 design of pollution shock resistance according to IEC 60068-2-27 design of pollution shock resistance according to IEC 60068-2-27 design of pollution shock resistance according to IEC 60068-2-27 design of pollution shock resistance according to IEC 60068-2-27 design of pollution shock resistance according to IEC 60068-2-27 design of pollution shock resistance according to IEC 60068-2-27 design of pollution shock resistance according to IEC 60068-2-27 design of pollution shock resistance according to IEC 60068-2-27 design of pollution shock resistance according to IEC 60068-2-27 design of pollution shock resistance according to IEC 60068-2-27 design of pollution shock resistance according to IEC 60068-2-27 design of pollution shock resistance according to IEC 60068-2-27 design of pollution shock resistance according to IEC 60068-2-27 design of pollution shock resistance according	
manufacturer's article number  of the supplied contactor of the supplied circuit-breakers of the supplied link module architecturical data size of the circuit-breaker size of load feeder product extension auxiliary switch insulation voltage with degree of pollution 3 at AC rated value  degree of pollution surge voltage resistance rated value shock resistance according to IEC 60068-2-27 mechanical service life (switching cycles) of contactor typical type of assignment  Ambient conditions  ambient temperature oduring operation during storage during transport  arrival 3RT2015-1AP61 3RV2011-1HA10 3RA1921-1DA00  Sungal-1-1DA00  Sungal-	
of the supplied contactor     of the supplied circuit-breakers     of the supplied link module     of the supplied link module    SRA1921-1DA00	
of the supplied circuit-breakers     of the supplied link module  General technical data  size of the circuit-breaker  size of load feeder  product extension auxiliary switch insulation voltage with degree of pollution 3 at AC rated value  degree of pollution  surge voltage resistance rated value shock resistance according to IEC 60068-2-27  mechanical service life (switching cycles) of contactor typical  type of assignment  Ambient conditions  ambient temperature  degree of pollution  ambient temperature  during operation  during storage during transport  and analyze and a RV2011-1HA10  3RA1921-1DA00  600  400  400  400  400  400  400	
● of the supplied link module  General technical data  size of the circuit-breaker  size of load feeder  product extension auxiliary switch insulation voltage with degree of pollution 3 at AC rated value  degree of pollution  surge voltage resistance rated value shock resistance according to IEC 60068-2-27 mechanical service life (switching cycles) of contactor typical  type of assignment  Ambient conditions  ambient temperature ● during operation ● during storage ● during transport  • during transport  • during transport  • S00  S00  690 V  697 V	
Size of the circuit-breaker \$00   size of load feeder \$00   product extension auxiliary switch Yes   insulation voltage with degree of pollution 3 at AC rated value 690 V   degree of pollution 3   surge voltage resistance rated value 6 kV   shock resistance according to IEC 60068-2-27 6g / 11 ms   mechanical service life (switching cycles) of contactor typical 30 000 000   type of assignment 1   Ambient conditions   ambient temperature • during operation -20 +60 °C   • during storage -50 +80 °C   • during transport -55 +80 °C	
size of the circuit-breaker \$00   size of load feeder \$00   product extension auxiliary switch Yes   insulation voltage with degree of pollution 3 at AC rated value 690 V   degree of pollution 3   surge voltage resistance rated value 6 kV   shock resistance according to IEC 60068-2-27 6g / 11 ms   mechanical service life (switching cycles) of contactor typical 30 000 000   type of assignment 1   Ambient conditions 1   ambient temperature • during operation -20 +60 °C   • during storage -50 +80 °C   • during transport -55 +80 °C	
size of load feeder  product extension auxiliary switch insulation voltage with degree of pollution 3 at AC rated value  degree of pollution surge voltage resistance rated value shock resistance according to IEC 60068-2-27 mechanical service life (switching cycles) of contactor typical  type of assignment  Ambient conditions  ambient temperature	
product extension auxiliary switch insulation voltage with degree of pollution 3 at AC rated value  degree of pollution  surge voltage resistance rated value shock resistance according to IEC 60068-2-27 fying a satisfact of the first of th	
insulation voltage with degree of pollution 3 at AC rated value  degree of pollution  surge voltage resistance rated value  shock resistance according to IEC 60068-2-27  shock resistance according to IEC 60068-2-27  mechanical service life (switching cycles) of contactor typical  type of assignment  1  Ambient conditions  ambient temperature  oldering operation  during storage  during transport  690 V  69	
value 3   surge voltage resistance rated value 6 kV   shock resistance according to IEC 60068-2-27 6g / 11 ms   mechanical service life (switching cycles) of contactor typical 30 000 000   type of assignment 1   Ambient conditions 1   ambient temperature • during operation -20 +60 °C   • during storage -50 +80 °C   • during transport -55 +80 °C	
surge voltage resistance rated value  shock resistance according to IEC 60068-2-27  mechanical service life (switching cycles) of contactor typical  type of assignment  1  Ambient conditions  ambient temperature  o during operation  during storage  during transport  6 kV  30 000 000  11 ms  30 000 000  12 contactor typical  1 conditions  -20 +60 °C  -50 +80 °C	
shock resistance according to IEC 60068-2-27  shock resistance according to IEC 60068-2-27  mechanical service life (switching cycles) of contactor typical  type of assignment  1  Ambient conditions  ambient temperature  of during operation  during storage  of during transport  -50 +80 °C  -55 +80 °C	
mechanical service life (switching cycles) of contactor typical  type of assignment  1  Ambient conditions  ambient temperature  • during operation • during storage • during transport  -20 +60 °C  -50 +80 °C	
type of assignment  Ambient conditions  ambient temperature  • during operation • during storage • during transport  -20 +60 °C  -50 +80 °C	
Ambient conditions  ambient temperature  • during operation • during storage • during transport  -20 +60 °C  -50 +80 °C  -55 +80 °C	
ambient temperature  • during operation  • during storage  • during transport  -20 +60 °C  -50 +80 °C  -55 +80 °C	
<ul> <li>during operation</li> <li>during storage</li> <li>during transport</li> <li>-20 +60 °C</li> <li>-50 +80 °C</li> <li>-55 +80 °C</li> </ul>	
<ul> <li>during storage</li> <li>during transport</li> <li>-50 +80 °C</li> <li>-55 +80 °C</li> </ul>	
• during transport -55 +80 °C	
Main aircuit	
Wall Circuit	
number of poles for main current circuit 3	
design of the switching contact electromechanical	
adjustable current response value current of the current-dependent overload release 5.5 8 A	
operating voltage	
• rated value 690 V	
• at AC-3 rated value maximum 690 V	
operating frequency rated value 50 60 Hz	
operational current at AC-3 at 400 V rated value 6.5 A	
operating power at AC-3	
• at 400 V rated value 3 000 W	
• at 500 V rated value 4 000 W	
Control circuit/ Control	
control supply voltage at AC	
• at 50 Hz rated value 220 V	

at 50 Hz rated value	187 242 V
at 60 Hz rated value	240 V
at 60 Hz rated value	192 264 V
apparent holding power of magnet coil at AC	4.8 VA
inductive power factor with the holding power of the coil	0.25
Auxiliary circuit	
number of NC contacts for auxiliary contacts	0
number of NO contacts for auxiliary contacts	1
Protective and monitoring functions	
trip class	CLASS 10
design of the overload release	thermal (bimetallic)
response value current of instantaneous short-circuit trip unit	104 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
at 480 V rated value	4.8 A
<ul> <li>at 600 V rated value</li> </ul>	6.1 A
yielded mechanical performance [hp]	
<ul> <li>for single-phase AC motor</li> </ul>	
— at 110/120 V rated value	0.25 hp
— at 230 V rated value	0.5 hp
<ul> <li>for 3-phase AC motor</li> </ul>	
<ul> <li>— at 200/208 V rated value</li> </ul>	1.5 hp
— at 220/230 V rated value	2 hp
— at 460/480 V rated value	3 hp
— at 575/600 V rated value	5 hp
Short-circuit protection	
product function short circuit protection	Yes
design of the short-circuit trip	magnetic
conditional short-circuit current (Iq)	
at 400 V according to IEC 60947-4-1 rated value	153 000 A
at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions	
at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position	vertical
at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position  fastening method	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug
at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position  fastening method height	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm
at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position fastening method height width	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm
at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position fastening method height width depth	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm
at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position fastening method height width depth required spacing	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm
at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position fastening method height width depth required spacing     for grounded parts	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm 97.1 mm
at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position fastening method height width depth required spacing     for grounded parts     — forwards	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm 97.1 mm
at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position fastening method height width depth required spacing     for grounded parts     — forwards     — backwards	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm 97.1 mm
at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position fastening method height width depth required spacing  • for grounded parts — forwards — backwards — upwards	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm 97.1 mm  0 mm 0 mm 20 mm
<ul> <li>at 400 V according to IEC 60947-4-1 rated value</li> <li>Installation/ mounting/ dimensions</li> <li>mounting position</li> <li>fastening method</li> <li>height</li> <li>width</li> <li>depth</li> <li>required spacing</li> <li>for grounded parts</li> <li>forwards</li> <li>backwards</li> <li>upwards</li> <li>at the side</li> </ul>	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm 97.1 mm  0 mm 0 mm 20 mm 9 mm
at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position fastening method height width depth required spacing     for grounded parts	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm 97.1 mm  0 mm 0 mm 20 mm
at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position fastening method height width depth required spacing     for grounded parts         — forwards         — backwards         — upwards         — at the side         — downwards         • for live parts	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm 97.1 mm  0 mm 0 mm 20 mm 9 mm 10 mm
at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position fastening method height width depth required spacing     for grounded parts	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm 97.1 mm  0 mm 0 mm 20 mm 9 mm
at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position fastening method height width depth required spacing     for grounded parts	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm 97.1 mm  0 mm 0 mm 20 mm 9 mm 10 mm
at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position fastening method height width depth required spacing     for grounded parts         — forwards         — backwards         — upwards         — at the side         — downwards         — for wards         — for live parts         — forwards         — backwards         — at the side         — downwards         — forwards         — forwards         — backwards	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm 97.1 mm  0 mm 0 mm 20 mm 9 mm 10 mm 0 mm
at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position fastening method height width depth required spacing  at for grounded parts  backwards  upwards  at the side  downwards  for live parts  forwards  backwards  upwards  for live parts  forwards  backwards  upwards  upwards  for live parts  upwards  upwards  upwards  upwards	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm 97.1 mm  0 mm 0 mm 20 mm 10 mm 10 mm 0 mm 20 mm
at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position fastening method height width depth required spacing     for grounded parts	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm 97.1 mm  0 mm 0 mm 20 mm 9 mm 10 mm 0 mm 20 mm
at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position  fastening method height width depth  required spacing  at for grounded parts  backwards  upwards  at the side  downwards  for live parts  forwards  backwards  upwards  at the side  downwards  backwards  upwards  at the side  downwards  at the side  downwards  at the side  connections/ Terminals	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm 97.1 mm  0 mm 0 mm 20 mm 10 mm 0 mm 0 mm 10 mm 9 mm 10 mm 9 mm 10 mm
at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position fastening method height width depth required spacing  at for grounded parts  forwards  backwards  upwards  at the side  downwards  for live parts  forwards  upwards  backwards  upwards  for live parts  downwards  upwards  at the side  downwards  at the side  downwards  at the side  at the side  downwards  at the side  downwards  at the side	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm 97.1 mm  0 mm 0 mm 20 mm 9 mm 10 mm 0 mm 20 mm
at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position fastening method height width depth required spacing  • for grounded parts — forwards — backwards — upwards — at the side — downwards  • for live parts — forwards — backwards — upwards — at the side — downwards — to ruive parts — forwards — backwards — at the side — downwards — upwards — downwards — at the side  Connections/ Terminals type of electrical connection for main current circuit	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm 97.1 mm  0 mm 0 mm 20 mm 10 mm 0 mm 0 mm 10 mm 9 mm 10 mm 9 mm 10 mm
at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position fastening method height width depth  required spacing     ofor grounded parts	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm 97.1 mm  0 mm 0 mm 20 mm 9 mm 10 mm 0 mm 20 mm 9 mm 10 mm 20 mm 9 mm 10 mm 20 mm
at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position fastening method height width depth required spacing     ofor grounded parts         — forwards         — backwards         — upwards         — at the side         — downwards         — forwards         — backwards         — at the side         — downwards         — backwards         — backwards         — backwards         — at the side         — connections/ Terminals  type of electrical connection for main current circuit  type of connectable conductor cross-sections     ofor main contacts stranded     at AWG cables for main contacts connectable conductor cross-section for main contacts	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm 97.1 mm  0 mm 0 mm 20 mm 9 mm 10 mm 0 mm 20 mm 9 mm 10 mm 20 mm 5 mm 20 mm 9 mm 10 mm 10 mm 9 mm
at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position fastening method height width depth required spacing  a for grounded parts  backwards  backwards  upwards  at the side  downwards  for live parts  forwards  backwards  upwards  at the side  downwards  for live parts  forwards  at the side  connections/ Terminals  type of electrical connection for main current circuit  type of connectable conductor cross-sections  at AWG cables for main contacts  connectable conductor cross-section for main contacts finely stranded with core end processing	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm 97.1 mm  0 mm 0 mm 20 mm 9 mm 10 mm 0 mm 20 mm 9 mm 10 mm 20 mm 20 mm 10 mm 20 mm 10 mm 10 mm
at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position fastening method height width depth required spacing     ofor grounded parts         — forwards         — backwards         — upwards         — at the side         — downwards         — forwards         — backwards         — at the side         — downwards         — backwards         — backwards         — backwards         — at the side         — connections/ Terminals  type of electrical connection for main current circuit  type of connectable conductor cross-sections     ofor main contacts stranded     at AWG cables for main contacts connectable conductor cross-section for main contacts	vertical Snap-mounted to DIN rail or screw-mounted with additional push-in lug 167.2 mm 45 mm 97.1 mm  0 mm 0 mm 20 mm 9 mm 10 mm 0 mm 20 mm 9 mm 10 mm 20 mm 20 mm 10 mm 20 mm 10 mm 10 mm

proportion of dangerous failures with high demand rate according to SN 31920

protection class IP on the front according to IEC 60529

touch protection on the front according to IEC 60529

finger-safe, for vertical contact from the front

Certificates/ approvals

**General Product Approval** 

For use in hazardous locations Declaration of Conformity



Confirmation









Declaration of Conformity

**Test Certificates** 

Marine / Shipping



Special Test Certificate

Type Test Certificates/Test Report







Marine / Shipping







Confirmation

other

Vibration and Shock

Railway

## 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=3RA2110-1HA15-1AP6

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2110-1HA15-1AP6

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2110-1HA15-1AP6

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

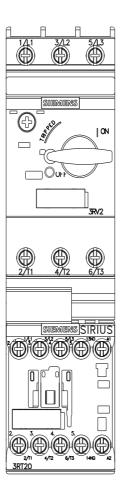
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA2110-1HA15-1AP6&lang=en

Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RA2110-1HA15-1AP6/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2110-1HA15-1AP6&objecttype=14&gridview=view1



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