## SIEMENS

## Data sheet

## 3RK1301-0CB13-1AA4



F-RS1E-X for ET 200S Failsafe reversing starter Setting range 2.4...16 A Mechanical switching Electronic protection AC-3, up to 7.5 kW / 400 V expandable for Brake control module 2DI module 2DI control module Circuit breaker signaling parameterizable

product brand name	SIMATIC
product designation	Motor starters
design of the product	reversing starter
product type designation	ET 200S
General technical data	
product function on-site operation	Yes
power loss [W] for rated value of the current	
<ul> <li>at AC in hot operating state</li> </ul>	18 W
<ul> <li>at AC in hot operating state per pole</li> </ul>	6 W
<ul> <li>without load current share typical</li> </ul>	4.44 W
insulation voltage rated value	500 V
degree of pollution	3 at 400 V, 2 at 500 V according to IEC60664 (IEC61131)
surge voltage resistance rated value	6 kV
maximum permissible voltage for protective separation between main and auxiliary circuit	400 V
shock resistance	5g / 11 ms
vibration resistance	2g
operating frequency maximum	80 1/h
mechanical service life (operating cycles) of the main contacts typical	100 000
type of assignment	2
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/26/2016
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8
Weight	2.54 kg
product function	
direct start	No
reverse starting	Yes
product component motor brake output	Yes
product feature	
<ul> <li>brake control with 230 V AC</li> </ul>	No
<ul> <li>brake control with 24 V DC</li> </ul>	No
<ul> <li>brake control with 180 V DC</li> </ul>	No
<ul> <li>brake control with 500 V DC</li> </ul>	No
product extension braking module for brake control	Yes
product function short circuit protection	Yes
design of short-circuit protection	circuit-breakers
maximum short-circuit current breaking capacity (Icu)	
• at 400 V rated value	50 kA
Electromagnetic compatibility	

EMC emittal interference according to EC 097-1         Construction to eccording to EC 0100-4.4           • Aux to construction to EC 0100-4.4         2 VV on voltage supply, inputs and outputs           • Aux to construction surge according to EC 0100-4.5         2 VV on voltage supply, inputs and outputs           • Aux to construction surge according to EC 0100-4.5         2 VV on voltage supply, inputs and outputs           • Aux to construction surge according to EC 0100-4.5         2 VV (U > 2 V VD)           • Ede based instruction caccording to EC 0100-4.5         2 VV (U > 2 V VD)           • Steley related data         2 VV (U > 2 V VD)           • Steley related data         2 VV (U > 2 V VD)           • Steley related data         3 000 FT           • Failure rel (FT) at tea of necognizable hazardous failures         3 000 FT           • Failure rel (FT) at tea of one recognizable hazardous failures         3 000 FT           • Editar stele (FT) at tea of one recognizable hazardous failures         2 VE TT           • Editar stele (FT) at tea of one recognizable hazardous failures         2 VE TT           • Editar stele (FT) according to EN 2001         1 8 6           • Editar stele (FT) according to EN 2001         1 8 6           • Editar stele (FT)         9 5           • Editar stele (FT)         9 5           • Editar stele (FT)         9 5           •		
conductal interference         2 kV on voltage supply, inputs and outputs           evel to contuctor-earth surge according to EC 61000-43         2 kV on voltage supply, inputs and outputs           Control of the interference according to EC 61000-43         2 kV on voltage supply, inputs and outputs           Stridy related carts         2 kV on voltage supply, inputs and outputs           Stridy related carts         2 kV on voltage supply, inputs and outputs           Stridy related carts         2 kV on voltage supply, inputs and outputs           Stridy related carts         2 kV on voltage supply, inputs and outputs           Stridy related carts         2 kV on voltage supply, inputs and outputs           Stridy related carts         2 kV on voltage supply, inputs and outputs           Stridy related carts         2 kV on voltage supply, inputs and outputs           Stridy related carts         2 kV on voltage supply, inputs and outputs           Stridy related carts         2 kV on voltage supply, inputs and outputs           Stridy related carts         2 kV on voltage supply, inputs and outputs           Stridy related carts         2 kV on voltage supply, inputs and outputs           Stridy related carts         2 kV on voltage supply, inputs and outputs           Stridy related carts         2 kV on voltage supply, inputs and outputs           Stridy related carts         2 kV on voltage supply, inputs and supply, in	EMC emitted interference according to IEC 60947-1	CISPR11, ambience A (industrial sector)
• ale bis bis decording biEC 60004-4         2 Vion values supply, ipublic and outpublic supplication and outpublic supplication conducts are according to EC 61000-4-3         20 Vion 2 4V VOC 1           State state         2 Vion 2 4V VOC 1         20 Vion 2 4V VOC 1           State state data         2 Vion 2 4V VOC 1         20 Vion 2 4V VOC 1           State state data         2 Vion 2 4V VOC 1         20 Vion 2 4V VOC 1           State state data         2 Vion 2 4V VOC 1         20 Vion 2 4V VOC 1           State state data         2 Vion 2 4V VOC 1         20 Vion 2 4V VOC 1           State state data         2 Vion 2 4V VOC 1         20 Vion 2 4V VOC 1           State state data         2 Vion 2 4V VOC 1         20 Vion 2 4V VOC 1           State state data         2 Vion 2 4V VOC 1         20 Vion 2 4V VOC 1           State state data         2 Vion 2 4V VOC 1         20 Vion 2 4V VOC 1           State state data         2 Vion 2 4V VOC 1         20 Vion 2 4V VOC 1           State	EMC immunity according to IEC 60947-1	corresponds to degree of severity 3, ambience A (industrial sector)
• eve to conductor-early surge according to EC 61004-43         2 4V (U > 24 V DC)           Selectors interference according to EC 61004-43         2 BU MHz _ 1 GHz 10 Vim, 1 GHz _ 2 Hz 3 Vim, 2 GHz _ 2 7 GHz 1 Vim           Selectors interference according to EC 61004-43         2 BU MHz _ 1 GHz 10 Vim, 1 GHz _ 2 Hz 3 Vim, 2 GHz _ 2 7 GHz 1 Vim           Selectors interference according to EC 6204-1         0         0           failure rate [FT] at rate of recognizable hazardous failures (Ad)         380 FT         380 FT           Gallor rate [FT] at rate of non-recognizable hazardous failures (Ad)         31 a         11 a           TFTed         31 a         11 a         11 a           MTTef         11 a         11 a         11 a           MTTef         11 a         11 a         11 a           MTTef         12 a         11 a         11 a           MTTef         13 a         12 a	conducted interference	
• a let o candudor conductors arge according to IEC         1 V/ (U > 24 V DC)           Itel o based interference according to IEC 61000-4.3         80 MEL _ 1 0H2 (U > 10 H2	<ul> <li>due to burst according to IEC 61000-4-4</li> </ul>	2 kV on voltage supply, inputs and outputs
6 1000-4.5         MMA:	<ul> <li>due to conductor-earth surge according to IEC 61000-4-5</li> </ul>	2 kV (U > 24 V DC)
Safey related data		1 kV (U > 24 V DC)
sefe state         Last circuit open           stop category according to EC 60204-1         0           failure rate (FT) at rate of noc-recognizable hazardous failures (Add)         300 FT           failure rate (FT) at rate of non-recognizable hazardous failure rate (FT) at rate of non-recognizable failure failure rate (FT) at rate of non-recognizable failure failure rate on (FT)         90 %           safety device type according to EC 61508         8E-5 11/9           define rate on (FF)         90.5 %           failure rate failure rate on (FF)         90.5 %           failure rate failure rate on (FF)         90.5 %           failure rate failure rate on the front according to EC 60529         finger-safe           failure rate of rate or rate circuit         3           design of the switching contact         electromechanical           digitable circuit recording to EC 60529         finger-safe           fail	field-based interference according to IEC 61000-4-3	80 MHz 1 GHz 10 V/m, 1.4 GHz2 Hz 3 V/m, 2 GHz 2.7 GHz 1 V/m
stop category according to EC 6204-1         0           failur sci [FT] at rate of necognizable hazardous failures (htt]         3 800 FT           severage diagnostic coverage level (DCavg)         99 %           severage diagnostic coverage level (DCavg)         99 %           MTFF         11 a           MTFF         11 a           MTFF         13 a           EC 82061         SIL CL 3           PFD/D with high demand rate according to EC 82081         SILC 3           PFD/D with high demand rate according to EC 82081         SILC 3           SEX Claims Limit (subsystem) according to EN ISO 13840-1         4           EEC 82061         SILC 3           PFD/D with high demand rate according to EC 61088         SILC 3           Average probability of faure on demand (PEDarg) with low demand rate according to EC 61088         SIL 6108           Safe faulter factor (SFF)         96 %           Average probability of faure on demand pED EC 61508         1           Th value for port fast interval or service life according to EC 61508         1           Average probability of faure on demand pED EC 61508         1           Th value for port fast interval or service life according to EC 61528         10 a           Markware fault tolerance according to EC 60529         Inger-safe           Muta otcault <td>Safety related data</td> <td></td>	Safety related data	
inlure rate [FT] at rate of recognizable hazardous failures (Add)         3 800 FT           failures (Add)         25 FTT           severage diagnostic coverage level (OCavg)         90 %           MTFF         11 a           MTFF         11 a           IEC 62051         Sil Calin Linit (subsystem) according to EN 82061           Sil Calin Linit (subsystem) according to EN 82061         Sil CL 3           PFID with high demand rate according to EC 62061         1.8E-9 tin           ISO 13849         Performance level (PL) according to EC 6308-2           Varage probability of failure on demand (PEDavg) with low         8E-5 11y           default relation (SFP)         90.5 %           hardware fault folderand or secording to IEC 61508         1           T value for probatility of failure on demand (PEDavg) with low         8E-5           Safe failure relation (SFP)         90.5 %           hardware fault folderance according to IEC 61508         1           T value for probatility of failure on demand (PEDavg) with low         8E-5           design of the switching contat         selectronal Safe)           probatility container according to IEC 60529         10 a           design of the switching contat         selectronal Safe)           protection class IP on the front according to IEC 60529         10 a	safe state	Load circuit open
(Ad)         2           Filture rate [FI] at rate of non-recognizable hexardous         2           Filture rate [FI] at rate of non-recognizable hexardous         2           MTFF         11 a           MTTFd         31 a           EC azost         31 a           EC azost         31 a           SIL Clini Limit (subsystem) according to EN 62061         SILC.3           PFHO with high demand rate according to EN 62061         18E 9 tin           ISO 13849         PL           performance level (PL) according to EN 150 13849-1         4           IEC 63080         Section 1           aftery device type according to IEC 61508-         8E-5 1/y           Average probability of fature on demand (PFDavg) with low         8E-5 1/y           PErbary with low demand rate according to IEC 61508         8E-5           Safe taiture factor (BF)         90.5 %           Inattware fault insoma caccording to IEC 61508         10 a           Exercise Safe Safe         10 a           Exercise Safe Safe Safe Safe Safe Safe Safe Saf	stop category according to IEC 60204-1	0
failure (Adu)         9% %           warage dispositic coverage level (DCavg)         9% %           MTEF         11 a           MTTFd         31 a           EC 02001         SUCL 3           FMD with high demand rate according to EN 02061         SUCL 3           FMD with high demand rate according to EN 02061         186-9 1/h           ISO 13840         Performance level (PL) according to EN 150 1384-1           Lectargery according to EN 150 1384-1         PL e           catagory according to EN 150 1384-1         PL e           eatagory according to EC 61508.4         4           EC 61300         Set 5 1/y           Average probability of failurs on demand (PFDavg) with low demand rate according to EC 61508         8E-5 1/y           PFDaw with low demand rate according to EC 61508         1           Tri value for proof lest interval or service life according to EC 61508         1           Tri value for proof lest interval or service life according to EC 60529         IP20           rouch protection on the front according to EC 60529         IP20           touch protection on the front according to EC 60529         IP20           dough protection on the front according to EC 60529         IP20           for ord triats according to EC 60529         IP20           dough protection on the front acc		3 800 FIT
MTEP     11 a       MTTP4     31 a       EC6 82061     31 a       SBL Clam Limit (subsystem) according to EN 82061     SILCL 3       PPHD with high demant rate according to EN 82061     18E9 1 h       S0 13849     18E9 1 h       S0 13849     Performance level (PL) according to EN 150 13849-1     PL e       category according to EN 150 13849-1     PL e       category according to EN 50 13849-1     PL e       category according to EN 50 13849-1     BE-5 11/y       denand rate acc. to IEC 61508     BE-5 11/y       denand rate acc. to IEC 61508     BE-5 11/y       PDavg with owdemant rate according to IEC 61508     1       T1 value for protest interval or service life according to IEC 61508     1       T1 value for protest interval or service life according to IEC 61508     1       Diractor fact for the front according to IEC 60529     Inger-sale       Mumber of poles for main current circuit     3       design of the witching context     electromechanical       design of the witching context     24 16 A       operating frequency 1 rate value     200400 V       operating frequency 1 rate value     200	•••	25 FIT
MTFPd         31 a           EC data SL. Clain Link (subsystem) according to EN 62061         SLC 3           PFHD with high demand rate according to EC 62061         1.8E-9 1/h           ISO 13849         Performance level (PL) according to EN ISO 13849-1         PL e           catagory according to EN ISO 13849-1         PL e           catagory according to EC 61508-2         Type B           Average probability of failure on demand (PEPavg) with low demand rate according to IEC 61508         8E-5           Safe failure factor (SFF)         995 %           PrDawy with low demand rate according to IEC 61508         1           T1 value for profest interval or service life according to IEC 61508         1           T1 value for profest interval or service life according to IEC 60529         IP20           Tordet interval or service life according to IEC 60529         IP20           fuilt detaution         10 a           design of the switching contact         electromechanical           adjustable current response value current of the current-         electromechanical           adjustable current response value current of the current-         electromechanical           adjustable current response value current of the current-         electromechanical           adjustable current response value current of the current-         electromechanical           adjust	average diagnostic coverage level (DCavg)	99 %
IEC 62061     SIL C.1am Limit (subsystem) according to EK 62061     SILCL 3       SPHD with high demand rate according to EC 62061     1.8E-9 1/h       ISO 13349     Performance level (PL) according to EN ISO 13849-1     4       Category according to EN ISO 13849-1     4       IEC 6100     Fee 4       arkity device type according to EC 61508-2     Type B       Average probability of failure on demand (PFDarg) with low     6E-5 1/y       PFDarg with low demand rate according to IEC 61508     8E-5       Safe failure fraction (SFF)     99.5 %       Inardware fault lorennce according to IEC 61508     1       T1 value for proof test Interval or service life according to IEC 60529     10 a       Electrical Safety     Inger-safe       protection class IP on the front according to IEC 60529     Inger-safe       Main circuit     3       number of poles for main current circuit     3       design of the switching contact     electronechanical       edgendent current response value current of the current-face degeneent or value according to IEC 60529     10 %       operating frequency 1 rated value     20 400 V       operating frequency 1 rated value     10 %	MTBF	11 a
SiL Claim Limit (subsystem) according to EX 62061     SiLCL 3       PFHD with high demand rate according to EC 62061     1.8E-9 t/h       StD 13849     Performance level (PL) according to EN ISO 13849-1     PL e       category according to EN ISO 13849-1     PL e       safety device type according to EK 61508-2     Type B       Average probability of failure on demand (PFDavg) with low     BE-5 1/y       Safe failure factorin (SFF)     99.5 %       PrDavg with low demand rate according to IEC 61508     1       Safe failure factorin (SFF)     99.5 %       Indvare fault tolerance according to IEC 61508     1       To value for proof test interval or service life according to IEC 60529     In20       forcettor in class IP on the front according to IEC 60529     In20       touch protection on the front according to IEC 60529     In20       forcettor     3       design of the switching contact     electromechanical       adjustable current esponse value current of the current-dependent covical relazes     200400 V       operating frequency 1 rated value     50 Hz       operating frequency 1 rated value     50 Hz       operating reguence 1 according to EC 60529     10 %       relative positive tolerance of the operating frequency     10 %       operating frequency 1 rated value     50 Hz       operating frequency 1 rated value     50 Hz <td>MTTFd</td> <td>31 a</td>	MTTFd	31 a
SiL Claim Limit (subsystem) according to EX 62061     SiLCL 3       PFHD with high demand rate according to EC 62061     1.8E-9 t/h       StD 13849     Performance level (PL) according to EN ISO 13849-1     PL e       category according to EN ISO 13849-1     PL e       safety device type according to EK 61508-2     Type B       Average probability of failure on demand (PFDavg) with low     BE-5 1/y       Safe failure factorin (SFF)     99.5 %       PrDavg with low demand rate according to IEC 61508     1       Safe failure factorin (SFF)     99.5 %       Indvare fault tolerance according to IEC 61508     1       To value for proof test interval or service life according to IEC 60529     In20       forcettor in class IP on the front according to IEC 60529     In20       touch protection on the front according to IEC 60529     In20       forcettor     3       design of the switching contact     electromechanical       adjustable current esponse value current of the current-dependent covical relazes     200400 V       operating frequency 1 rated value     50 Hz       operating frequency 1 rated value     50 Hz       operating reguence 1 according to EC 60529     10 %       relative positive tolerance of the operating frequency     10 %       operating frequency 1 rated value     50 Hz       operating frequency 1 rated value     50 Hz <td></td> <td></td>		
PFHD with high demand rate according to IEC 62061     1.8E-9 1/h       ISO 15849     Performance level (PL) according to EN ISO 13849-1     PL e       acting on y according to EN ISO 13849-1     4       IEC 61508     Safety device type according to IEC 61508-2     Type B       Average probability of failure on demand (PFDavg) with low demand rate according to IEC 61508     8E-5 1/y       Ber failure fraction (SFF)     99.5 %       Inardware fault tolerance according to IEC 61508     1       T1 value for proof test interval or service life according to IEC 61509     10 a       Bestand active fraction (SFF)     10 a       Inardware fault tolerance according to IEC 61508     10 a       Bestand according to IEC 60529     10 a       Protection class IP on the front according to IEC 60529     10 a       Index for proof test interval or service life according to IEC 60529     10 a       Index for proof test interval or service life according to IEC 60529     10 a       Index fortut     3     dectormechanical       Adjustable current response value current of the current-dependent orvordear relases     adjustable current of the according to IEC 60529       Inger-safe     Main according to IEC 60529     10 a       Operating frequency 1 rated value     20 a		SILCL 3
ISO 13849       PL e         performance level (PL) according to EN ISO 13849-1       PL e         category according to EN ISO 13849-1       4         IEC 61508       Safety device type according to IEC 61508-2       Type B         Average probability of failure on demand (PFDerg) with lowe       BE-5 1/y         Befa failure fraction (SFF)       99.5 %         PTDavy with wo demand rate according to IEC 61508       1         T1 value for proof test interval or service life according to IEC       10 a         Electrical Safety       Protection class IP on the front according to IEC 60529       IP20         Inumber of poles for main current circuit       3       electromechanical         degisport of the interval or service life according to IEC 60529       IP20         Inumber of poles for main current circuit       3         design of the switching contact       electromechanical         digistable current response value current of the current-       24 16 A         operating frequency 1 rated value       50 Hz         operating frequency 1 rated value       50 Hz         operating frequency 1 rated value       50 Hz         operating rouge rated value       10 %         operating rouge rated value       10 %         operating rouge rated value       10 % <t< td=""><td></td><td></td></t<>		
performance level (PL) according to EN ISO 13849-1         PL e           category according to EN ISO 13849-1         4           Select 6508		
category according to EN ISO 13849-1     4       IEC 61508     Safety device type according to IEC 61508-2     Type B       Avarage probability of failure on demand (PFDavg) with low demand rate acco. to IEC 61508     BE-5 1/y       PFDarg with low demand rate according to IEC 61508     BE-5       Safe failure fraction (SFF)     99.5 %       hardware fault tolerance according to IEC 61508     1       11 value for protest interval or service life according to IEC 60529     IP20       protection class IP on the front according to IEC 60529     IP20       function     IP20       number of poles for main current circuit     3       design of the switching contact     electromechanical       adjustable current response value current of the current-     24		PLe
IEC 61508         safety device type according to IEC 61508-2       Type B         Average probability of failure on demand (PEDaryg) with low       8E-5 1/y         Befandume according to IEC 61508       8E-5         Safe failure fraction (SFF)       99.5 %         Andream fault tolerance according to IEC 61508       1         T1 value for proof test interval or service life according to IEC 61508       10 a         Electrical Safety       10 a         Protection class IP on the front according to IEC 60529       Inger-safe         Main circuit       3         design of the switching contact       electromechanical         adjustable current reports value current of the current-       24 16 A         operating frequency 1 rated value       50 Hz         operating frequency 1 rated value       60 Hz         operating frequency 1 rated value       10 %         operating frequency 1 rated value       10 %         operating prover at AC-3 at 400 V rated value       10 %         operating power for 3-phase motors at 400 V at 50 Hz       10 %         operating power for 3-phase motors at 400 V at 50 Hz       11 7.5 kW         operating power for 3-phase motors at 400 V at 50 Hz       12         operating power for 3-phase motors at 400 V at 50 Hz       11 7.5 kW		
safety device type according to IEC 61508-2         Type B           Average probability of failure on demand (PEPavg) with low demand rate according to IEC 61508         BE-5 1/y           Bafe failure fraction (SFF)         995 %           hardware fault tolerance according to IEC 61508         BE-5           Bet failure fraction (SFF)         995 %           Indriver fault tolerance according to IEC 61508         1           T1 value for proof test interval or service life according to IEC 60529         10 a           Electrical Safety         IP20           protection class IP on the front according to IEC 60529         IIP20           fland.circuit         3           design of the switching contact         electromechanical           adjustable current response value current of the current-         24 16 A           operating voltage rated value         200 400 V           operating frequency 1 rated value         60 Hz           operating frequency 1 rated value         60 Hz           operating rouge rated value         10 A           operating rouge rated value         10 A           operating rouge rated value         10 %           operating rouge rated value         10 %           operating rouge rated value         10 %           operating rouge rated value         10 % <td></td> <td>·</td>		·
Average probability of failure on demand (PFDavg) with low demand rate acc. to IEC 61508       8E-5 1/y         PFDarg with low demand rate according to IEC 61508       8E-5         Safe failure fraction (SFF)       99.5 %         hardware fault tolerance according to IEC 61508       1         T1 value for proof test interval or service life according to IEC       10         Electrical Safety       protection on the front according to IEC 60529       IP20         found chronic class IP on the front according to IEC 60529       Inger-safe         Main circuit       3       electronechanical         Adjustable current circuit       3       electronechanical         adjustable current response value current of the current- dependent overload rolese       200 400 V         Operating frequency 1 rated value       200 400 V         Operating frequency 2 rated value       50 Hz         operating frequency 2 rated value       50 Hz         operating requency 4 rated value       75 KW         operating power at AC-3 at 400 V rated valu		Tune R
PFDay with low demand rate according to IEC 61508     8E-5       Safe failure fraction (SFF)     99.5 %       hardware fault tolerance according to IEC 61508     1       T value for proof test interval or service life according to IEC     10 a       Electrical Safety     protection on the front according to IEC 60529     IP20       touch protection on the front according to IEC 60529     IP20       touch protection on the front according to IEC 60529     Ip20       touch protection on the front according to IEC 60529     Ip20       number of poles for main current circuit     3       design of the switching contact     electromechanical       adjustable current response value current of the current-     24 16 A       operating requency 1 rated value     200 400 V       operating requency 2 rated value     60 Hz       relative positive tolerance of the operating frequency     10 %       relative negative tolerance of the operating frequency     10 %       operating requency 2 rated value     60 Hz       operating router for 3-3 tat 400 V rated value     75 kW       operating power at AC-3 at 400 V rated value     75 kW       operating power for 3-phase motors at 400 V at 50 Hz     11 7.5 kW       inputs/ Outputs     72 kw       inputs/ Outputs     20 kon       opriating power at AC-3 at 400 V rated value     75 kw	Average probability of failure on demand (PFDavg) with low	
Safe failure fraction (SFF)     99.5 %       hardware fault tolerance according to IEC 61508     1       T1 value for proof test interval or service life according to IEC 61508     10 a       Electrical Safety     IP20       protection class IP on the front according to IEC 60529     finger-safe       Main circuit     3       number of poles for main current circuit     3       design of the switching contact     electromechanical       adjustable current response value current of the current-     2.4 16 A       type of the motor protection     solid-state       operating frequency 1 rated value     50 Hz       operating frequency 2 rated value     60 Hz       relative negative tolerance of the operating frequency     10 %       relative negative tolerance of the operating frequency     10 %       operating range relative to the operating frequency     10 %       operating range relative to the operating frequency     10 %       relative negative tolerance of the operating frequency     10 %       operating negresend current     16 A       operating power at AC-3 at 400 V rated value     7.5 KW       operating power at AC-3 at 400 V rated value     7.5 KW       operating power at AC-3 at 400 V rated value     2       optict function     11 7.5 kW       unumber of digital inputs     2       <		8E 5
hardware fault tolerance according to IEC 61508     1       T1 value for proof test interval or service life according to IEC 61508     10 a       Electrical Safety     protection class IP on the front according to IEC 60529     IP20       touch protection on the front according to IEC 60529     IP20       fain circuit     3       design of the switching contact     electromechanical       adjustable current response value current of the current-dependent vortoal release     24 16 A       type of the motor protection     solid-state       operating frequency 1 rated value     50 Hz       operating frequency 2 rated value     60 Hz       relative positive tolerance of the operating frequency     10 %       operating range relative to the operating frequency     10 %       operating range relative to the operating frequency     10 %       operating prover for 3-3 at 400 V rated value     7.5 kW       operating power at AC-3 at 400 V at 50 Hz     1.1 7.5 kW       inputs/ Outputs     Yes       product function     0       • digital inputs grameterizable     Yes       • digital inputs ignals     0       • for digital inputs ignals     0		
T1 value for proof test interval or service life according to IEC 61508       10 a         Electrical Safety       protection class IP on the front according to IEC 60529       IP20         touch protection on the front according to IEC 60529       Inger-safe         Main circuit       3         design of the switching contact       electromechanical         adjustable current response value current of the current- dependent overload release       solid-state         operating voltage rated value       200 400 V         operating requency 1 rated value       50 Hz         operating frequency 2 rated value       60 Hz         relative to lerance of the operating frequency       10 %         operating requency 2 rated value       50 Hz         operating requency 1 rated value       60 Hz         relative negative to lerance of the operating frequency       10 %         operating ruge relative to the operating voltage at AC at 50 Hz       200 440 V         operating power for 3-phase motors at 400 V at 50 Hz       1.1 7.5 kW         operating power for 3-phase motors at 400 V at 50 Hz       1.1 7.5 kW         inputs/ Outputs       2         inputs/ Outputs       2         inputs/ Outputs       2         inputs/ Output signals       0         or digital input signals		
Electrical Safety           protection class IP on the front according to IEC 60529         IP20           touch protection on the front according to IEC 60529         finger-safe           Main circuit         3           design of the switching contact         electromechanical           adjustable current response value current of the current- dependent overload release         2.4 16 A           type of the motor protection         solid-state           operating requency 1 rated value         200 400 V           operating frequency 2 rated value         50 Hz           operating requency 1 rated value         60 Hz           relative negative tolerance of the operating frequency         10 %           operating range relative to the operating frequency         10 %           operating power at AC-3 at 400 V rated value         7.5 kW           operating power for 3-phase motors at 400 V at 50 Hz         1.1 7.5 kW           Impuber of digital inputs parameterizable         No           number of digital inputs signals         0           of or digital input signals         0	T1 value for proof test interval or service life according to IEC	
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operating voltage rated value       200 400 V         operating frequency 1 rated value       50 Hz         operating frequency 2 rated value       60 Hz         relative positive tolerance of the operating frequency       10 %         relative negative tolerance of the operating frequency       10 %         operating range relative to the operating voltage at AC at 50 Hz       200 440 V         operating power at AC-3 at 400 V rated value       16 A         operating power at AC-3 at 400 V rated value       7.5 kW         operating power of 3-phase motors at 400 V at 50 Hz       1.1 7.5 kW         Inputs/ Outputs       Yes         odigital inputs parameterizable       Yes         odigital outputs parameterizable       No         number of digital inputs       2         if or digital output signals       0         or digital input signals       0	•	solid-state
inclusion       50 Hz         operating frequency 2 rated value       60 Hz         relative positive tolerance of the operating frequency       10 %         relative negative tolerance of the operating frequency       10 %         operating range relative to the operating frequency       10 %         operational current       200 440 V         • at AC-3 at 400 V rated value       16 A         operating power at AC-3 at 400 V rated value       7.5 kW         operating power for 3-phase motors at 400 V at 50 Hz       1.1 7.5 kW         Inputs/ Outputs       Yes         product function       Yes         • digital inputs parameterizable       No         number of digital inputs       2         number of sockets       0         • for digital output signals       0         of or digital input signals       0		
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• digital inputs parameterizable     Yes       • digital outputs parameterizable     No       • number of digital inputs     2       • number of sockets	Inputs/ Outputs	
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number of sockets     0       • for digital output signals     0       • for digital input signals     0       Supply voltage     0	<ul> <li>digital outputs parameterizable</li> </ul>	No
for digital output signals         o         for digital input signals         O         Supply voltage	number of digital inputs	2
• for digital input signals 0 Supply voltage	number of sockets	
Supply voltage	<ul> <li>for digital output signals</li> </ul>	0
	<ul> <li>for digital input signals</li> </ul>	0
	Supply voltage	
	type of voltage of the supply voltage	DC

EMV Functional Saf	ftey Test Certificates other Dangerous goods
General Product Approval	
rated value Approvals Certificates	
operating voltage at AC at 60 Hz according to CSA and UL	600 V
UL/CSA ratings	
<ul> <li>for supply voltage transmission</li> </ul>	via backplane bus
<ul> <li>for supply voltage line-side</li> </ul>	via backplane bus
<ul> <li>for main energy transmission</li> </ul>	via energy bus
<ul> <li>for load-side outgoing feeder</li> </ul>	Screw-type terminals
<ul> <li>for main energy infeed</li> </ul>	screw-type terminals
• at the manufacturer-specific device interface	plug
type of electrical connection	
2 for digital input signals	using control module
1 for digital input signals	using control module
type of electrical connection	
type of electrical connection for main current circuit	screw-type terminals
Connections/ Terminals	
for communication transmission	via backplane bus
of the communication interface	via backplane bus
type of electrical connection	
• of the outputs	2 byte
of the inputs	2 byte
address space memory of address range	
protocol is supported AS-Interface protocol	No
product function bus communication	Yes
design of the interface PROFINET protocol	Yes
PROFINET protocol	Yes
PROFIBUS DP protocol	Yes
protocol is supported	
Communication/ Protocol	
relative humidity during operation	595%
during transport	-40 +70 °C
during operation	-40 +70 °C
during operation	0 60 °C
ambient temperature	
installation altitude at height above sea level maximum	2 000 m
Ambient conditions	
depth	150 mm
width	130 mm
height	290 mm
fastening method	pluggable on terminal module
mounting position	vertical, horizontal
Installation/ mounting/ dimensions	۲۲ ۲۲ ۷
control supply voltage 1 at DC rated value control supply voltage 1 at DC	21.6 26.4 V 24 24 V
control supply voltage at DC rated value	21.6 26.4 V
type of voltage of the control supply voltage	
Control circuit/ Control	20
maximum permissible	28.8 V
minimum permissible	20.4 V
supply voltage 1 at DC rated value	
supply voltage 1 at DC	24 24 V

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<u>Type Examination Cer-</u> <u>tificate</u> Type Test Certificates/Test Report **Confirmation** 

Transport Information

Environment

Environmental Confirmations

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