SIEMENS

Data sheet



DS1-X for ET 200S Standard DOL starter expandable Setting range 0.28...0.4 A AC-3, 0.1 kW / 400 V Electromechanical starter for brake control module

Figure similar

product designation Motor starters design of the product product type designation Fround type d				
design of the product direct starter product type designation ET 200S Sourcal technical data Froduct function on-site operation Yes power loss [W] for rated value of the current 4 A C in hot operating state per pole 3.33 W • at AC in hot operating state per pole 3.33 W • without load current share typical 4.12 W Insulation voltage rated value 6 kV degree of pollution 3 at 400 V, 2 at 500 V according to IEC80664 (IEC81131) surge voltage resistance rated value 6 kV maximum permissible voltage for protective separation between lamin and auditing circuit 400 V shock resistance 5g / 11 ms vibration resistance 5g / 11 ms vibration resistance 5g / 10 m vibration resistance 5g / 10 m operating frequency maximum 750 1/h mechanical service life (operating cycles) of the main contacts lypical 100 0000 type of assignment 2 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 10/26/2016 SVHC substance are accepted to the counce (Date of the counce (Date of the c	product brand name	SIMATIC		
Product type designation Yes	product designation	Motor starters		
Product function on-site operation prosent of the current of the c	design of the product	direct starter		
product function on-site operation power loss [W] for rated value of the current	product type designation	ET 200S		
power loss [W] for rated value of the current at AC in hot operating state at AC in hot operating state per pole awithout load current share typical swiftent load current share typical swiftent load current share typical degree of pollution surge voltage resistance rated value maximum permissible voltage for protective separation between main and auxiliary circuit shock resistance vibration (poperating cycles) of the main contacts by 750 1/h 100 000 vibration resistance (Date) vibration	General technical data			
at AC in hot operating state at AC in hot operating state per pole at AC in hot operating state per pole without load current share typical insulation voltage rated value 500 V degree of pollution surge voltage resistance rated value 6 kV maximum pemissible voltage for protective separation between main and auxiliary circuit shock resistance 9 cyperating frequency maximum 750 1/h mechanical service life (operating cycles) of the main contacts typical type of assignment 2 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) SYHC substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 Q reduct function of idrect start reverse staring No product component motor brake output Yes Product fautre • brake control with 230 V AC • brake control with 130 V DC • brake control with 180 V DC • brake control with 500 V DC • b	product function on-site operation	Yes		
• at AC in hot operating state per pole • without load current share typical • without load current share typical • to Wood egree of pollution • at 400 V, 2 at 500 V according to IEC60664 (IEC61131) • surge voltage resistance rated value • 6 kV • waximum permissible voltage for protective separation between main and auxiliary circuit • shock resistance • 5g / 11 ms • brate on the with 230 V AC • brake control with 230 V AC • brake control with 500 V DC • brake control with 500 V DC • product extension braking module for brake control • design of short-circuit protection • Vibroduct variety in the with 240 V DC • brake control with 500 V DC • product extension braking module for brake control • design of short-circuit protection • Circuit-breakers • Circuit-breakers • Circuit-breakers • Circuit-breakers • Circuit-breakers • Circuit-breakers	power loss [W] for rated value of the current			
without load current share typical 4.12 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 shock resistance 5g / 11 ms vibration resistance 2g operating frequency maximum 750 1/h mechanical service life (operating cycles) of the main contacts typical typical typical typical 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 -7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 Weight 0.9 kg product function 4 idrect start 5 reverse starting No product component motor brake output Yes product fautre 4 brake control with 230 V AC No b brake control with 230 V AC No b brake control with 180 V DC No b brake control with 500 V DC No b brake control with 500 V DC No product extension braking module for brake control Yes design of short-circuit protection Circuit-breakers	 at AC in hot operating state 	10 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 750 ½/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 SVHC substance name Lead - 7439-92-1 Lead aronoxide (lead oxide) - 1317-36-8 2 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 SVHC substance name Weight 9.9 kg Product function 4 e direct start Yes r everse starting No product feature Yes brake control with 230 V AC No o brake control with 24 V DC No o brake control with 500 V DC No o brake control with 500 V DC No <t< td=""><td> at AC in hot operating state per pole </td><td>3.33 W</td></t<>	 at AC in hot operating state per pole 	3.33 W		
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 750 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 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 Weight 0.9 kg product function Yes e direct slart Yes e reverse starting No product component motor brake output Yes product feature Ves e brake control with 230 V AC No e brake control with 180 V DC No e brake control with 180 V DC No e brake control with 500 V DC No e bra	 without load current share typical 	4.12 W		
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 750 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 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 Weight 9 kg product function Yes e direct start Yes e reverse starting No product component motor brake output Yes product feature No e brake control with 230 V AC No e brake control with 24 V DC No e brake control with 180 V DC No e brake control with 500 V DC No b brake control with 500 V DC No e br	insulation voltage rated value	500 V		
maximum permissible voltage for protective separation between main and auxillary circuit shock resistance sportating frequency maximum mechanical service life (operating cycles) of the main contacts typical type of assignment reference code according to IEC 81346-2 Substance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 Weight product function direct start reverse starting product component motor brake output product feature brake control with 230 V AC brake control with 24 V DC brake control with 500 v DC cricuit-breakers design of short-circuit protection circuit-breakers	degree of pollution	3 at 400 V, 2 at 500 V according to IEC60664 (IEC61131)		
main and auxiliary circuit shock resistance 5g /11 ms vibration resistance 2g operating frequency maximum mechanical service life (operating cycles) of the main contacts typical 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 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 Weight 0.9 kg roduct function direct start reverse starting No product component motor brake output Yes product feature brake control with 230 V AC brake control with 24 V DC brake control with 24 V DC brake control with 180 V DC brake contro	surge voltage resistance rated value	6 kV		
vibration resistance 2g operating frequency maximum 750 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 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 Weight 0.9 kg product function Yes • direct start Yes • reverse starting No product component motor brake output Yes • brake control with 230 V AC No • brake control with 230 V AC No • brake control with 180 V DC No • brake control with 180 V DC No • brake control with 500 V DC No product extension braking module for brake control Yes product function short circuit protection Yes design of short-circuit protection Yes		400 V		
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mechanical service life (operating cycles) of the main contacts typical type of assignment zerference code according to IEC 81346-2 Substance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 Weight product function	vibration resistance	2g		
type of assignment reference code according to IEC 81346-2 Substance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 Weight product function	operating frequency maximum	750 1/h		
reference code according to IEC 81346-2 Substance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 Weight product function	· · · · · · · · · · · · · · · · · · ·	100 000		
Substance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 Weight 0.9 kg product function olirect start reverse starting No product component motor brake output Yes product feature obrake control with 230 V AC brake control with 24 V DC brake control with 180 V DC brake control with 500 V DC No product extension braking module for brake control product function short circuit protection design of short-circuit protection circuit-breakers	type of assignment	2		
SVHC substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 Weight 0.9 kg product function olirect start reverse starting No product component motor brake output Yes product feature olired brake control with 230 V AC olired brake control with 24 V DC olired brake control with 180 V DC olired brake control with 500 V DC product extension braking module for brake control product function short circuit protection Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 No No No in the control with 24 V DC No in the control with 24 V DC No in the control with 500 V DC No circuit-breakers	reference code according to IEC 81346-2	Q		
Lead monoxide (lead oxide) - 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 Weight 0.9 kg product function	Substance Prohibitance (Date)	10/26/2016		
product function	SVHC substance name	Lead monoxide (lead oxide) - 1317-36-8		
 direct start reverse starting No product component motor brake output Yes product feature brake control with 230 V AC brake control with 24 V DC No brake control with 180 V DC brake control with 500 V DC No product extension braking module for brake control product function short circuit protection design of short-circuit protection Circuit-breakers 	Weight	0.9 kg		
 ● reverse starting Product component motor brake output Yes Product feature ● brake control with 230 V AC ● brake control with 24 V DC ● brake control with 180 V DC ● brake control with 500 V DC No Product extension braking module for brake control Product function short circuit protection Yes design of short-circuit protection Circuit-breakers 	product function			
product component motor brake output product feature brake control with 230 V AC brake control with 24 V DC brake control with 180 V DC brake control with 500 V DC No product extension braking module for brake control product function short circuit protection design of short-circuit protection Yes Circuit-breakers	direct start	Yes		
product feature • brake control with 230 V AC • brake control with 24 V DC • brake control with 180 V DC • brake control with 500 V DC Product extension braking module for brake control product function short circuit protection design of short-circuit protection Yes Circuit-breakers	reverse starting	No		
brake control with 230 V AC brake control with 24 V DC brake control with 180 V DC brake control with 500 V DC brake control with 500 V DC Product extension braking module for brake control Product function short circuit protection design of short-circuit protection Yes Circuit-breakers	product component motor brake output	Yes		
brake control with 24 V DC brake control with 180 V DC brake control with 500 V DC No product extension braking module for brake control product function short circuit protection design of short-circuit protection Ves circuit-breakers	product feature			
 ◆ brake control with 180 V DC ◆ brake control with 500 V DC No product extension braking module for brake control product function short circuit protection design of short-circuit protection No Yes circuit-breakers 	 brake control with 230 V AC 	No		
● brake control with 500 V DC product extension braking module for brake control product function short circuit protection design of short-circuit protection No Yes tricuit-breakers	 brake control with 24 V DC 	No		
product extension braking module for brake control Product function short circuit protection Yes design of short-circuit protection circuit-breakers	 brake control with 180 V DC 	No		
product function short circuit protection Yes design of short-circuit protection circuit-breakers	brake control with 500 V DC	No		
design of short-circuit protection circuit-breakers	product extension braking module for brake control	Yes		
5 · · · · · · · · · · · · · · · · · · ·	product function short circuit protection	Yes		
maximum short-circuit current breaking capacity (Icu)	design of short-circuit protection	circuit-breakers		
	maximum short-circuit current breaking capacity (Icu)			

at 400 V rated value	50 kA		
Electromagnetic compatibility	JU IA		
EMC emitted interference according to IEC 60947-1	CISPR11, ambience A (industrial sector)		
EMC immunity according to IEC 60947-1 conducted interference	corresponds to degree of severity 3, ambience A (industrial sector)		
	2 la)/ an valtage graphy inputs and graphs		
due to burst according to IEC 61000-4-4 due to sond later and burge good line to IEC 61000-4-5.	2 kV on voltage supply, inputs and outputs		
due to conductor-earth surge according to IEC 61000-4-5 due to conductor and due to conduct to IEC 61000-4-5	2 kV (U > 24 V DC)		
 due to conductor-conductor surge according to IEC 61000-4-5 	1 kV (U > 24 V DC)		
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		
Safety related data			
proportion of dangerous failures			
with low demand rate according to SN 31920	50 %		
with high demand rate according to SN 31920	75 %		
B10 value with high demand rate according to SN 31920	1 000 000		
failure rate [FIT] with low demand rate according to SN 31920	100 FIT		
IEC 61508			
T1 value for proof test interval or service life according to IEC	20 a		
61508	200		
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			
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	0.28 0.4 A		
type of the motor protection	bimetal		
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		
operational current			
 at AC-3 at 400 V rated value 	0.4 A		
operating power at AC-3 at 400 V rated value	0.1 kW		
operating power for 3-phase motors at 400 V at 50 Hz	0.1 0.1 kW		
Inputs/ Outputs			
product function			
digital inputs parameterizable	No		
digital outputs parameterizable	No		
number of digital inputs	0		
number of sockets			
• for digital output signals	0		
for digital input signals	0		
Supply voltage			
type of voltage of the supply voltage	DC		
supply voltage 1 at DC	24 24 V		
supply voltage 1 at DC rated value			
minimum permissible	20.4 V		
maximum permissible	28.8 V		
Control circuit/ Control			
type of voltage of the control supply voltage	DC		
control supply voltage at DC rated value	20.4 28.8 V		
control supply voltage 1 at DC rated value	20.4 28.8 V		
control supply voltage 1 at DC	24 24 V		
power loss [W] in auxiliary and control circuit			
in switching state OFF			
— with bypass circuit	0.3744 W		
— without bypass circuit	0.374 W		

in auditahing atata ON			
in switching state ON	4 4404 W		
— with bypass circuit	4.1184 W		
— without bypass circuit	4.118 W		
Installation/ mounting/ dimensions			
mounting position	vertical, horizontal		
fastening method	pluggable on terminal module		
height	265 mm		
width	45 mm		
depth	120 mm		
Ambient conditions	0.000		
installation altitude at height above sea level maximum	2 000 m		
ambient temperature	0.000		
during operation	0 60 °C		
during storage	-40 +70 °C		
during transport	-40 +70 °C		
relative humidity during operation	5 95 %		
Communication/ Protocol			
protocol is supported			
PROFIBUS DP protocol	Yes		
PROFINET protocol	Yes		
design of the interface PROFINET protocol	Yes		
product function bus communication	Yes		
protocol is supported AS-Interface protocol	No		
product function			
 supports PROFlenergy measured values 	No		
supports PROFlenergy shutdown	No		
address space memory of address range			
• of the inputs	1 byte		
of the outputs	1 byte		
type of electrical connection			
 of the communication interface 	via backplane bus		
for communication transmission	via backplane bus		
Connections/ Terminals			
type of electrical connection for main current circuit	screw-type terminals		
type of electrical connection			
 1 for digital input signals 	using control module		
2 for digital input signals	using control module		
type of electrical connection			
 at the manufacturer-specific device interface 	plug		
 for main energy infeed 	screw-type terminals		
 for load-side outgoing feeder 	Screw-type terminals		
 for main energy transmission 	via energy bus		
 for supply voltage line-side 	via backplane bus		
for supply voltage transmission	via backplane bus		
UL/CSA ratings			
operating voltage at AC at 60 Hz according to CSA and UL rated value	600 V		
Approvals Certificates			
General Product Approval			









Confirmation





EMV For use in h ous location	Test Certificates	other	Dangerous goods
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Type Test Certific-

ates/Test Report







Environment

Environmental Con-firmations

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=3RK1301-0EB00-0AA2

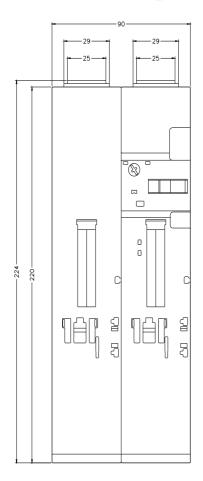
Cax online generator

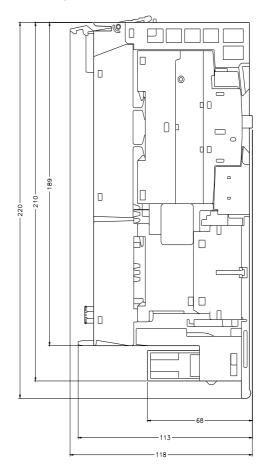
ort.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RK1301-0EB00-0AA2

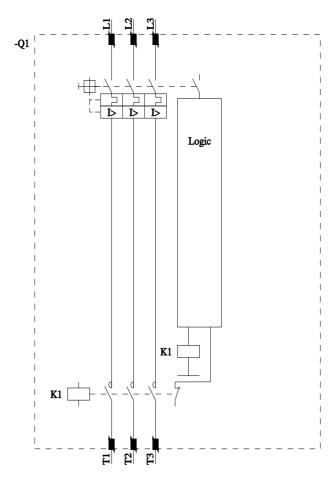
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RK1301-0EB00-0A

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RK1301-0EB00-0AA2&lang=en







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