## **SIEMENS**

US2:22DUE32AF **Data sheet** 



Figure similar

Reversing motor starter Size 1 Three phase full voltage Solid-state overload relay OLRelay amp range 10-40a 110VAC 50HZ / 120VAC 60HZ coil Non-combination type Enclosure type (open)

design of the product special product feature ESP200 overload relay     Seperal technical data	product brand name	Class 22
weight [Ib] 6 lb Height x Width x Depth [in] 7.69 x 10.5 x 3.92 in touch protection against electrical shock installation altitude [ft] at height above sea level maximum ambient temperature [*Ft] 4 uring storage 2 +149 *Ft	design of the product	Full-voltage reversing motor starter
weight [ib] Height x Width x Depth [in] touch protection against electrical shock installation altitude [ft] at height above sea level maximum ambient temperature ["F] during operation	special product feature	ESP200 overload relay
Height x Width x Depth [in]  touch protection against electrical shock installation altitude [ft] at height above sea level maximum ambient temperature ["F]  during storage  during operation  number of NC contacts for main contacts  operating voltage for main current circuit at AC at 60 Hz  maximum  operational current at AC at 600 V rated value  mechanical service life (switching cycles) of the main  contacts typical  Auxiliary contact  number of NC contacts at contactor for auxiliary contacts  number of NC contacts at contactor for auxiliary contacts  number of NC contacts at contactor for auxiliary contacts  number of NC contacts at contactor for auxiliary contacts  number of NC contacts at contactor for auxiliary contacts  number of NC contacts at contactor for auxiliary contacts  number of NC contacts at contactor for auxiliary contacts  number of NC contacts at contactor for auxiliary contacts  number of NC contacts at contactor for auxiliary contacts  number of NC contacts at contactor for auxiliary contacts  number of NC contacts at contactor for auxiliary contacts  number of NC contacts at contacts of contact according  to UL  Coil  type of voltage of the control supply voltage  AC	General technical data	
touch protection against electrical shock installation altitude [ft] at height above sea level maximum ambient temperature [°F]  • during storage • during operation	weight [lb]	6 lb
installation altitude [ft] at height above sea level maximum ambient temperature [*F]  • during storage • during operation -4 +104 *F  ambient temperature • during storage • during operation -20 +40 *C  country of origin  Mexico  Horsepower ratings  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 475/600 V rated value • at 575/600 V rated value • at 60 ND contacts for main contacts operating voltage for main current circuit at AC at 60 Hz maximum operational current at AC at 600 V rated value  appearating voltage for main current circuit at AC at 60 Hz maximum operational current at AC at 600 V rated value  appearating soltage for main current circuit at AC at 600 Hz maximum operational current at AC at 600 V rated value  appearating soltage for main current circuit at AC at 600 Hz maximum operational current at AC at 600 V rated value  appearating soltage if (switching cycles) of the main contacts typical  Auxiliary contact  number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary co	Height x Width x Depth [in]	7.69 × 10.5 × 3.92 in
ambient temperature (°F)  • during storage • during operation ambient temperature • during storage • during operation ambient temperature • during storage • during operation -20 +65 °C -20 +40 °C  country of origin  Mexico  Horsepower ratings  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 • at 575/600 V rated value • by	touch protection against electrical shock	Not finger-safe
<ul> <li>during storage</li> <li>during operation</li> <li>during operation</li> <li>during storage</li> <li>during operation</li> <li>20 +65 °C</li> <li>during operation</li> <li>20 +40 °C</li> </ul> Country of origin Horsepower ratings yielded mechanical performance [hp] for 3-phase AC motor <ul> <li>at 200/208 V rated value</li> <li>at 220/230 V rated value</li> <li>at 460/480 V rated value</li> <li>at 575/600 V rated value</li> <li>ohp</li> </ul> Contactor size of contactor <ul> <li>number of NO contacts for main contacts</li> <li>operating voltage for main current circuit at AC at 60 Hz maximum</li> <li>operating voltage for main current circuit at AC at 60 Hz maximum</li> <li>operating voltage for main current circuit at AC at 600 V rated value</li> <li>mechanical service life (switching cycles) of the main contacts typical</li> </ul> Auxiliary contact <ul> <li>number of NO contacts at contactor for auxiliary contacts</li> <li>number of NC contacts at contactor for auxiliary contacts</li> <li>number of NO contacts at contactor for auxiliary contacts</li> <li>number of total auxiliary contacts maximum</li> <li>contact rating of auxiliary contacts of contactor according to UL</li> </ul> Coil <ul> <li>type of voltage of the control supply voltage</li> </ul> AC <ul> <li>AC</li> </ul>	installation altitude [ft] at height above sea level maximum	6560 ft
during operation     ambient temperature     during storage     during operation     during operation     country of origin      Mexico  Horsepower ratings  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 460/480 V rated value     at 575/600 V rated value     at 575/600 V rated value     o hp  size of contactor  number of NO contacts for main current circuit at AC at 60 Hz maximum  operational current at AC at 600 V rated value  roperational current at AC at 600 V rated value  appearational current at AC at 600 V rated value  roperational current at AC at 600 V rated value  appearational current at AC at 600 V rated value  roperational current at AC at 600 V rated value  appearational current at AC at 600 V rated value  roperational current at AC at 60	ambient temperature [°F]	
ambient temperature  • during storage  • during operation  country of origin  Horsepower ratings  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  • at 575/600 V rated value  on hp  contactor  number of NO contacts for main contacts  operating voltage for main current circuit at AC at 60 Hz maximum  operational current at AC at 600 V rated value  mechanical service life (switching cycles) of the main contacts typical  Auxiliary contact  number of NC contacts at contactor for auxiliary contacts  number of NC contacts at contactor for auxiliary contacts  number of NC contacts at contactor for auxiliary contacts  number of NC contacts at contactor for auxiliary contacts  number of NC contacts at contactor for auxiliary contacts  number of No contacts at contactor for auxiliary contacts  number of	during storage	-22 +149 °F
during storage     during operation     country of origin  Horsepower ratings  yielded mechanical performance [hp] for 3-phase AC motor     at 200/208 V rated value     at 220/230 V rated value     at 575/600 V rated value     at 675/600 V rated value     o hp  Contactor  size of contactor  number of NO contacts for main contacts     operating voltage for main current circuit at AC at 60 Hz maximum     operational current at AC at 600 V rated value     poperational current at AC at 600 V rated value  number of NO contacts for main contacts     operating voltage for main current circuit at AC at 60 Hz maximum  operational current at AC at 600 V rated value  mechanical service life (switching cycles) of the main contacts typical  Auxiliary contact  number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum  contact rating of auxiliary contacts of contactor according to UL  Cotil  type of voltage of the control supply voltage  AC	during operation	-4 +104 °F
• during operation     country of origin  Horsepower ratings  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     • at 575/600 V rated value     isize of contactor     size of contacts for main contacts     operating voltage for main current circuit at AC at 60 Hz maximum     operational current at AC at 600 V rated value     appearational current at AC at 600 V rated value     poperational curren	ambient temperature	
country of origin Mexico  Horsepower ratings  yielded mechanical performance [hp] for 3-phase AC motor  • at 200/208 V rated value 7.5 hp • at 220/230 V rated value 0 hp • at 575/600 V rated value 0 hp  Contactor  size of contacts for main contacts 3 operating voltage for main current circuit at AC at 60 Hz maximum operational current at AC at 600 V rated value 27 A mechanical service life (switching cycles) of the main contacts typical  Auxiliary contacts at contactor for auxiliary contacts 1 number of NO contacts at contactor for auxiliary contacts 1 number of NO contacts at contactor for auxiliary contacts 1 number of total auxiliary contacts maximum 8 contact rating of auxiliary contacts of contactor according to UL  Coil  type of voltage of the control supply voltage AC	<ul> <li>during storage</li> </ul>	-30 +65 °C
yielded mechanical performance [hp] for 3-phase AC motor  • at 200/208 V rated value • at 200/208 V rated value • at 460/480 V rated value • at 460/480 V rated value • at 575/600 V rated value  o hp  Contactor  size of contactor number of NO contacts for main contacts operating voltage for main current circuit at AC at 60 Hz maximum operational current at AC at 600 V rated value  mechanical service life (switching cycles) of the main contacts typical  Auxiliary contact number of NO contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum  contact rating of auxiliary contacts of contactor according to UL  Coil  type of voltage of the control supply voltage  AC	during operation	-20 +40 °C
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 460/480 V rated value • at 575/600 V rated value • 0 hp  Contactor  size of contactor  number of NO contacts for main contacts operating voltage for main current circuit at AC at 60 Hz maximum operational current at AC at 600 V rated value  mechanical service life (switching cycles) of the main contacts typical  Auxiliary contact  number of NC contacts at contactor for auxiliary contacts number of NC contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum  contact rating of auxiliary contacts of contactor according to UL  Coil  type of voltage of the control supply voltage  7.5 hp 9	country of origin	Mexico
motor  • at 200/208 V rated value  • at 220/230 V rated value  • at 460/480 V rated value  • at 460/480 V rated value  • at 4575/600 V rated value  • o hp  Contactor  size of contactor  number of NO contacts for main contacts  operating voltage for main current circuit at AC at 60 Hz maximum  operational current at AC at 600 V rated value  27 A  mechanical service life (switching cycles) of the main contacts typical  Auxiliary contact  number of NC contacts at contactor for auxiliary contacts  number of NC contacts at contactor for auxiliary contacts  number of total auxiliary contacts maximum  contact rating of auxiliary contacts of contactor according to UL  Coil  type of voltage of the control supply voltage  7.5 hp  7.5 hp  7.5 hp  7.5 hp  6.5 hp  7.5 hp  6.6 hp  6.7 hp  6.7 hp  6.0 hp  6.0 V  6.0 V	Horsepower ratings	
at 220/230 V rated value at 460/480 V rated value by the contactor  size of contactor  size of contactor  number of NO contacts for main contacts operating voltage for main current circuit at AC at 60 Hz maximum operational current at AC at 600 V rated value operational service life (switching cycles) of the main contacts typical  Auxiliary contact  number of NC contacts at contactor for auxiliary contacts number of NC contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum  contact rating of auxiliary contacts of contactor according to UL  Coil  type of voltage of the control supply voltage  7.5 hp 0		
at 460/480 V rated value  by at 575/600 V rated value  O hp  Contactor  size of contactor  number of NO contacts for main contacts  operating voltage for main current circuit at AC at 60 Hz maximum  operational current at AC at 600 V rated value  operational current at AC at 600 V rated value  mechanical service life (switching cycles) of the main contacts typical  Auxiliary contact  number of NC contacts at contactor for auxiliary contacts  number of NO contacts at contactor for auxiliary contacts  number of total auxiliary contacts maximum  contact rating of auxiliary contacts of contactor according to UL  Coil  type of voltage of the control supply voltage  O hp  O hactor  a to MEMA controller size 1  and hour size 1  10000000  10000000  10000000  1000000	• at 200/208 V rated value	7.5 hp
ontactor     size of contactor     number of NO contacts for main contacts     operating voltage for main current circuit at AC at 60 Hz     maximum     operational current at AC at 600 V rated value     prescription of NO contacts typical  Auxiliary contact  number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum  contact rating of auxiliary contacts of contactor according to UL  Coil  type of voltage of the control supply voltage  NEMA controller size 1  1000 V  1000	• at 220/230 V rated value	7.5 hp
size of contactor size of contactor number of NO contacts for main contacts operating voltage for main current circuit at AC at 60 Hz maximum operational current at AC at 600 V rated value mechanical service life (switching cycles) of the main contacts typical  Auxiliary contact number of NC contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL  Coil  type of voltage of the control supply voltage  NEMA controller size 1  0000 V  10000000  27 A 100000000  100000000  20 A 100000000  100000000  1000000000  1000000	• at 460/480 V rated value	0 hp
size of contactor  number of NO contacts for main contacts  operating voltage for main current circuit at AC at 60 Hz maximum  operational current at AC at 600 V rated value  mechanical service life (switching cycles) of the main contacts typical  Auxiliary contact  number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts  number of total auxiliary contacts maximum  contact rating of auxiliary contacts of contactor according to UL  Coil  type of voltage of the control supply voltage  NEMA controller size 1  3  600 V  100000000  27 A  100000000  100000000  100000000  1000000	• at 575/600 V rated value	0 hp
number of NO contacts for main contacts  operating voltage for main current circuit at AC at 60 Hz maximum  operational current at AC at 600 V rated value  mechanical service life (switching cycles) of the main contacts typical  Auxiliary contact  number of NC contacts at contactor for auxiliary contacts  number of NO contacts at contactor for auxiliary contacts  number of total auxiliary contacts maximum  contact rating of auxiliary contacts of contactor according to UL  Coil  type of voltage of the control supply voltage  3 600 V 60	Contactor	
operating voltage for main current circuit at AC at 60 Hz maximum  operational current at AC at 600 V rated value  mechanical service life (switching cycles) of the main contacts typical  Auxiliary contact  number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum  contact rating of auxiliary contacts of contactor according to UL  Coil  type of voltage of the control supply voltage  600 V  600 V	size of contactor	NEMA controller size 1
maximum operational current at AC at 600 V rated value mechanical service life (switching cycles) of the main contacts typical  Auxiliary contact  number of NC contacts at contactor for auxiliary contacts number of total auxiliary contacts at contactor for auxiliary contacts  number of total auxiliary contacts maximum  contact rating of auxiliary contacts of contactor according to UL  Coil  type of voltage of the control supply voltage  27 A  100000000  10000000  10000000  1000000	number of NO contacts for main contacts	3
mechanical service life (switching cycles) of the main contacts typical  Auxiliary contact  number of NC contacts at contactor for auxiliary contacts  number of NO contacts at contactor for auxiliary contacts  number of total auxiliary contacts maximum  contact rating of auxiliary contacts of contactor according to UL  Coil  type of voltage of the control supply voltage  10000000  10000000  100000000  1000000	, ,	600 V
contacts typical  Auxiliary contact  number of NC contacts at contactor for auxiliary contacts  number of NO contacts at contactor for auxiliary contacts  number of total auxiliary contacts maximum  contact rating of auxiliary contacts of contactor according to UL  Coil  type of voltage of the control supply voltage  AC	operational current at AC at 600 V rated value	27 A
number of NC contacts at contactor for auxiliary contacts number of NO contacts at contactor for auxiliary contacts number of total auxiliary contacts maximum  contact rating of auxiliary contacts of contactor according to UL  Coil  type of voltage of the control supply voltage  O  10A@600VAC (A600), 5A@600VDC (P600)	, <u> </u>	10000000
number of NO contacts at contactor for auxiliary contacts  number of total auxiliary contacts maximum  contact rating of auxiliary contacts of contactor according to UL  Coil  type of voltage of the control supply voltage  1  1  10A@600VAC (A600), 5A@600VDC (P600)  AC	Auxiliary contact	
number of NO contacts at contactor for auxiliary contacts  number of total auxiliary contacts maximum  contact rating of auxiliary contacts of contactor according to UL  Coil  type of voltage of the control supply voltage  1  1  10A@600VAC (A600), 5A@600VDC (P600)  AC	number of NC contacts at contactor for auxiliary contacts	0
contact rating of auxiliary contacts of contactor according to UL  10A@600VAC (A600), 5A@600VDC (P600)  to UL  Coil  type of voltage of the control supply voltage  AC		1
to UL  Coil type of voltage of the control supply voltage  AC	number of total auxiliary contacts maximum	8
type of voltage of the control supply voltage AC		10A@600VAC (A600), 5A@600VDC (P600)
The same of the sa	Coil	
control supply voltage	type of voltage of the control supply voltage	AC
	control supply voltage	

• at AC at 50 Hz rated value 110 V		
at AC at 60 Hz rated value     120 V		
holding power at AC minimum 8.6 W		
apparent pick-up power of magnet coil at AC 218 VA		
apparent holding power of magnet coil at AC 25 VA		
operating range factor control supply voltage rated value of magnet coil 0.85 1.1		
percental drop-out voltage of magnet coil related to the input voltage		
ON-delay time 19 29 ms		
OFF-delay time 10 24 ms		
Overload relay		
product function		
overload protection     Yes		
• phase failure detection Yes		
asymmetry detection     Yes		
ground fault detection     Yes		
• test function Yes		
• external reset No		
reset function Manual, automatic and remote		
trip class CLASS 5 / 10 / 20 (factory set) / 30		
adjustable current response value current of the current- dependent overload release  10 40 A		
make time with automatic start after power failure maximum  3 s		
relative repeat accuracy 1 %		
product feature protective coating on printed-circuit board  Yes		
number of NC contacts of auxiliary contacts of overload relay		
number of NO contacts of auxiliary contacts of overload relay		
operational current of auxiliary contacts of overload relay		
• at AC at 600 V 5 A		
• at DC at 250 V 1 A		
contact rating of auxiliary contacts of overload relay according to UL 5A@600VAC (B600), 1A@250VDC (R300)		
insulation voltage (Ui)		
• with single-phase operation at AC rated value 600 V		
• with multi-phase operation at AC rated value 300 V		
Enclosure		
degree of protection NEMA rating  Open device (no enclosure)		
design of the housing  NA		
Mounting/wiring		
mounting position Vertical		
fastening method Surface mounting and installation		
type of electrical connection for supply voltage line-side  Screw-type terminals		
tightening torque [lbf-in] for supply  35 35 lbf-in		
type of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded  1x (14 2 AWG)		
temperature of the conductor for supply maximum permissible 75 °C		
material of the conductor for supply  AL or CU		
type of electrical connection for load-side outgoing feeder  Screw-type terminals		
tightening torque [lbf-in] for load-side outgoing feeder 35 35 lbf-in		
type of connectable conductor cross-sections at AWG cables for load-side outgoing feeder single or multi-stranded		
temperature of the conductor for load-side outgoing feeder 75 °C		
maximum permissible		
maximum permissible material of the conductor for load-side outgoing feeder  AL or CU		
·		
material of the conductor for load-side outgoing feeder AL or CU		

coil at AWG cables single or multi-stranded	
temperature of the conductor at magnet coil maximum permissible	75 °C
material of the conductor at magnet coil	CU
type of electrical connection for auxiliary contacts	Screw-type terminals
tightening torque [lbf·in] at contactor for auxiliary contacts	10 15 lbf·in
type of connectable conductor cross-sections at contactor at AWG cables for auxiliary contacts single or multi-stranded	1x (12 AWG), 2x (16 14 AWG), 2x (18 16 AWG)
temperature of the conductor at contactor for auxiliary contacts maximum permissible	75 °C
material of the conductor at contactor for auxiliary contacts	CU
type of electrical connection at overload relay for auxiliary contacts	Screw-type terminals
tightening torque [lbf·in] at overload relay for auxiliary contacts	7 10 lbf-in
type of connectable conductor cross-sections at overload relay at AWG cables for auxiliary contacts single or multi-stranded	2x (20 14 AWG)
temperature of the conductor at overload relay for auxiliary contacts maximum permissible	75 °C
material of the conductor at overload relay for auxiliary contacts	CU
Short-circuit current rating	
design of the fuse link for short-circuit protection of the main circuit required	10kA@600V (Class H or K); 100kA@600V (Class R or J)
design of the short-circuit trip	Thermal magnetic circuit breaker
breaking capacity maximum short-circuit current (Icu)	
● at 240 V	14 kA
● at 480 V	10 kA
● at 600 V	10 kA
certificate of suitability	NEMA ICS 2; UL 508; CSA 22.2, No.14
Further information	

Industrial Controls - Product Overview (Catalogs, Brochures,...)

www.usa.siemens.com/iccatalog

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:22DUE32AF

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) <a href="https://support.industry.siemens.com/cs/US/en/ps/US2:22DUE32AF">https://support.industry.siemens.com/cs/US/en/ps/US2:22DUE32AF</a>

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

http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:22DUE32AF&lang=en

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:22DUE32AF/certificate

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