## SIEMENS

## Data sheet

## US2:18FUF82BA



Non-reversing motor starter, Size 2, Three phase full voltage, Solid-state overload relay, OLR amp range 13-52A, Combination type, 50A circuit breaker, Enclosure NEMA type 1, Indoor general purpose use, Extra-wide enclosure

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product brand name	Class 18 & 26		
design of the product	Full-voltage non-reversing motor starter with motor circuit protector		
special product feature	ESP200 overload relay; Dual voltage coil		
General technical data			
Height x Width x Depth [in]	24 × 20 × 8 in		
touch protection against electrical shock	NA for enclosed products		
installation altitude [ft] at height above sea level maximum	6560 ft		
ambient temperature [°F]			
during storage	-22 +149 °F		
during operation	-4 +104 °F		
ambient temperature			
<ul> <li>during storage</li> </ul>	-30 +65 °C		
during operation	-20 +40 °C		
Horsepower ratings			
yielded mechanical performance [hp] for 3-phase AC motor			
at 200/208 V rated value	10 hp		
at 220/230 V rated value	15 hp		
<ul> <li>at 460/480 V rated value</li> </ul>	25 hp		
at 575/600 V rated value	25 hp		
Contactor			
size of contactor	NEMA controller size 2		
number of NO contacts for main contacts	3		
operating voltage for main current circuit at AC at 60 Hz maximum	600 V		
operational current at AC at 600 V rated value	45 A		
mechanical service life (switching cycles) of the main contacts typical	1000000		
Auxiliary contact			
number of NC contacts at contactor for auxiliary contacts	0		
number of NO contacts at contactor for auxiliary contacts	1		
number of total auxiliary contacts maximum	7		
contact rating of auxiliary contacts of contactor according to UL	10A@600VAC (A600), 5A@600VDC (P600)		
Coil			
type of voltage of the control supply voltage	AC		
control supply voltage			
• at AC at 60 Hz rated value	110 240 V		
holding power at AC minimum	8.6 W		

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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	50 %	
ON-delay time	19 29 ms	
OFF-delay time	10 24 ms	
Overload relay		
product function		
<ul> <li>overload protection</li> </ul>	Yes	
<ul> <li>phase failure detection</li> </ul>	Yes	
asymmetry detection	Yes	
ground fault detection	Yes	
• test function	Yes	
external reset	Yes	
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	13 52 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	1	
number of NO contacts of auxiliary contacts of overload relay	1	
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)		
<ul> <li>with single-phase operation at AC rated value</li> </ul>	600 V	
<ul> <li>with multi-phase operation at AC rated value</li> </ul>	300 V	
Enclosure		
degree of protection NEMA rating	1	
design of the housing	indoors, usable on a general basis	
Circuit Breaker		
type of the motor protection	Motor circuit protector (magnetic trip only)	
operational current of motor circuit breaker rated value	50 A	
adjustable current response value current of instantaneous short-circuit trip unit	180 600 A	
Mounting/wiring		
mounting position	Vertical	
fastening method	Surface mounting and installation	
type of electrical connection for supply voltage line-side	Box lug	
type of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded	1x (10 AWG 1/0 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	Box lug	
tightening torque [lbf·in] for load-side outgoing feeder	45 45 lbf·in	
type of connectable conductor cross-sections at AWG cables for load-side outgoing feeder single or multi- stranded	1x (14 2 AWG)	
temperature of the conductor for load-side outgoing feeder maximum permissible	75 °C	
material of the conductor for load-side outgoing feeder	AL or CU	
type of electrical connection of magnet coil	Screw-type terminals	
tightening torque [lbf·in] at magnet coil	5 12 lbf·in	

type of connectable conductor cross-sections of magnet coil at AWG cables single or multi-stranded	2x (16 12 AWG)			
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 short-circuit trip	Instantaneous trip circuit breaker			
breaking capacity maximum short-circuit current (Icu)				
• at 240 V	100 kA			
• at 480 V	100 kA			
• at 600 V	25 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=US2:18FUF82BA				
Service&Support (Manuals, Certificates, Characteristics, FAQs,) https://support.industry.siemens.com/cs/US/en/ps/US2:18FUF82BA				
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros,) <u>http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:18FUF82BA⟨=en</u>				
Certificates/approvals				

https://support.industry.siemens.com/cs/US/en/ps/US2:18FUF82BA/certificate

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