## **SIEMENS**

Data sheet US2:14IP820F81



Non-reversing motor starter, Size 3 1/2, Three phase full voltage, Amb. compensate bimetal OLR, Contactor amp rating 115A, 110V 50Hz / 120V 60Hz coil, Non-combination type, Enclosure type 12, Dust/drip proof for indoors

product brand name design of the product special product feature Half-size starter  Ceneral technical data  weight [ib] 47.5 lb Height X Width X Depth [in] 26 × 13 × 8 in  touch protection against electrical shock installation altitude [ft] at height above sea level maximum ambient temperature [TF] during storage 4 utring storage 4 utring storage 4 utring storage 5 utring operation 4 utring storage 4 utring operation 4 utring operation 4 use Auring operation 20 use Auring operation 20 use Auring operation 20 use Auring operation 4 use Auring operation 4 use Auring operation 5 use Auring operation 5 use Auring operation 5 use Auring operation 6 use Auring operation 7 use Auring operation 8 use Auring operation 8 use Auring operation 9 use Auring ope		
Special product feature  General technical data  Weight [Ib]  Height X Width x Depth [In]  Louch protection against electrical shock Installation altitude [It] at height above sea level maximum  ambient temperature [F]  • during storage • during operation  ambient temperature • during storage •	product brand name	Class 14 & 22
weight [b] 47.5 lb Height x Width x Depth [in] 26 x 13 x 8 in touch protection against electrical shock NA for enclosed products installation altitude [ft] at height above sea level maximum 6560 ft amblent temperature [*F] • during storage -22 +149 *F • during operation -4 +104 *F  amblent temperature • during storage -30 +65 *C • during operation -20 +40 *C  country of origin UsA  ### Usage	design of the product	Full-voltage non-reversing motor starter
weight [ib] Height x Width x Depth [in] 20 x 13 x 8 in  touch protection against electrical shock Installation altitude [ft] at height above sea level maximum 6660 ft  ambient temperature [*F] • during storage • during operation -22 +149 *F • during operation -23 +65 *C • during operation -24 +104 *F  ambient temperature • during storage • during operation -25 +40 *C  country of origin  Wisspower ratings  yielded mechanical performance [hp] for 3-phase AC motor • at 200/208 V rated value • at 200/208 V rated value • at 200/208 V rated value • at 404/80 V rated value • at 575/600 V rated value • at 575/600 V rated value • at 640/480 V rated value • at 675/600 V rated value • at 675/600 V rated value  operating voltage 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 (operating cycles) of the main contacts typical  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 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 cont	special product feature	Half-size starter
Height x Width x Depth [in] 26 x 13 x 8 in  touch protection against electrical shock NA for enclosed products installation altitude [ft] at height above sea level maximum  ambient temperature [*F]  • during storage -22 *149 *F  • during operation 4 *104 *F  ambient memperature  • during storage -30 *65 *C  • during operation -20 *40 *C  country of origin  Viscappower ratings  yielded mechanical performance [hp] for 3-phase AC motor  • at 200/208 V rated value 30 hp  • at 220/230 V rated value 40 hp  • at 460/480 V rated value 75 hp  • at 575/600 V rated value 75 hp  contactor  size of contactor  size of contactor Controller half size 3 1/2  number of NO contacts for main contacts 3  operating voltage for main current circuit at AC at 60 Hz mechanical service life (operating cycles) of the main contacts  hypical  Auxiliary contact  number of NO 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 NO 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 NO 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 NO 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 NO contacts at contactor for auxiliary contacts 1  number of NO contacts at contactor for auxiliary contacts 1  number of total auxiliary contacts of contactor according to UL  Ocil  type of voltage of the control supply voltage 2  • at AC at 50 Hz rated value 110 V  • at AC at 60 Hz rated value 110 V	General technical data	
touch protection against electrical shock installation altitude [ft] at height above sea level maximum ambient temperature [*F] • during storage • during operation -4 +104 *F  arbient temperature • during storage • during storage • during storage • during storage • during operation -20 +65 *C • during operation -20 +40 *C  country of origin  Horsepower ratings yielded mechanical performance [hp] for 3-phase AC motor • at 200/208 V rated value • at 200/208 V rated value • at 878/600 V rated value • at 578/600 V rated value • at 678/600 V rated value • at 578/600 V rated value  operation of NO contacts for main current circuit at AC at 60 Hz maximum operational current at AC at 600 V rated value mechanical service life (operating cycles) of the main contacts typical  Auxillary contact number of NO contacts at contactor for auxillary contacts number of NO contacts at contactor for auxillary contacts number of NO contacts at contactor for auxillary contacts number of NO contacts at contactor for auxillary contacts number of NO contacts at contactor for auxillary contacts number of NO contacts at contactor for auxillary contacts number of NO contacts at contactor for auxillary contacts number of NO contacts at contactor for auxillary contacts number of NO contacts at contactor for auxillary contacts number of NO contacts at contactor for auxillary contacts number of NO contacts at contactor for auxillary contacts number of NO contacts at contactor for auxillary contacts number of NO contacts at contactor for auxillary contacts number of NO contacts at contactor for auxillary contacts 1 10A@@00VAC (A600), 5A@@00VDC (P600)  Coll type of voltage of the control supply voltage • at AC at 50 Hz rated value • at AC at 50 Hz rated value • at AC at 50 Hz rated value	weight [lb]	47.5 lb
Installation altitude [ft] at height above sea level maximum ambient temperature [*F]  • during storage • during peration  • during storage • during operation  • during operation  • during operation  • 20 +65 °C  • country of origin  USA   Horsopower ratings  yielded mechanical performance [hp] for 3-phase AC motor • at 200/230 V rated value • at 220/230 V rated value • at 460/480 V rated value • at 65/600 V rated value • at 675/600 V rated value  Operating voltage 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 (operating 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  1 number of NC contacts at contactor for auxiliary contacts  1 number of NC contacts at contactor for auxiliary contacts  1 number of NC contacts at contactor for auxiliary contacts  1 number of NC contacts at contactor for auxiliary contacts  1 number of NC contacts at contactor for auxiliary contacts  1 number of NC contacts at contactor for auxiliary contacts  1 number of NC contacts at contactor for auxiliary contacts  1 number of NC contacts at contactor for auxiliary contacts  1 number of NC contacts at contactor for auxiliary contacts  1 number of NC contacts at contactor for auxiliary contacts  1 number of NC contacts at contactor for auxiliary contacts  1 number of NC contacts at contactor for auxiliary contacts  1 number of NC contacts at contactor for auxiliary contacts  1 number of NC contacts at contactor for auxil	Height x Width x Depth [in]	26 × 13 × 8 in
ambient temperature [*F]  • during storage • during operation  ambient temperature • during storage • during operation  • during storage • during operation  • during storage • during operation  • during operation  • during operation  • 22 +40 °C  USA  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 • at 575/600 V rated value  To hp  Contactor  size of contactor  number of NO 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  115 A mechanical service life (operating 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 1 number of NO 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 NO 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 NO 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 NO contacts at contactor for auxiliary contacts 2 number of NO contacts at contactor for auxiliary contacts 3 number of NO contacts at contactor for auxiliary contacts 4 AC At 50 Hz rated value 1 10 V  • at AC at 60 Hz rated value 1 110 V  1 20 V	touch protection against electrical shock	NA for enclosed products
<ul> <li>during storage</li> <li>during operation</li> <li>during storage</li> <li>during storage</li> <li>during operation</li> <li>during operation</li> <li>during operation</li> <li>20 +65 °C</li> <li>during operation</li> <li>20 +40 °C</li> <li>country of origin</li> <li>USA</li> <li>Hosspower ratings</li> <li>yielded mechanical performance [hp] for 3-phase AC motor</li> <li>at 200/208 V rated value</li> <li>at 220/230 V rated value</li> <li>at 60/480 V rated value</li> <li>at 575/600 V rated value</li> <li>75 hp</li> <li>at 575/600 V rated value</li> <li>75 hp</li> <li>contactor</li> <li>contractor</li> <li>size of contacts for main contacts</li> <li>a operating voltage for main current circuit at AC at 60 Hz maximum</li> <li>operational current at AC at 600 V rated value</li> <li>operational current at AC at 600 V rated value</li> <li>mechanical service life (operating cycles) of the main contacts typical</li> <li>Auxillary contact</li> <li>number of NC contacts at contactor for auxiliary contacts</li> <li>number of NC contacts at contactor for auxiliary contacts</li> <li>number of NC ontacts at contactor for auxiliary contacts</li> <li>number of NC ontacts at contactor for auxiliary contacts</li> <li>number of NC ontacts at contactor for auxiliary contacts</li> <li>number of NC ontacts at contactor for auxiliary contacts</li> <li>1</li> <li>number of NC ontacts at contacts of contactor according to UL</li> <li>Coil</li> <li>type of voltage of the control supply voltage</li> <li>at AC at 50 Hz rated value</li> <li>at AC at 50 Hz rated value</li> <li>at AC at 50 Hz rated value</li> <li>at AC at 60 Hz rated value</li> <li>20 V</li> </ul>	installation altitude [ft] at height above sea level maximum	6560 ft
<ul> <li>during operation</li> <li>during storage</li> <li>during operation</li> <li>during operation</li> <li>country of origin</li> <li>USA</li> </ul> Horsepower ratings yielded mechanical performance [hp] for 3-phase AC motor <ul> <li>at 200/208 V rated value</li> <li>at 2200/230 V rated value</li> <li>at 480/480 V rated value</li> <li>at 480/480 V rated value</li> <li>at 575/600 V rated value</li> <li>at 575/600 V rated value</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>operational current at AC at 600 V rated value</li> <li>115 A</li> <li>mechanical service life (operating cycles) of the main contacts typical</li> </ul> Auxillary contact <ul> <li>number of NO contacts at contactor for auxiliary contacts</li> <li>number of NO contacts at contactor for auxiliary contacts</li> <li>number of NO contacts at contactor for auxiliary contacts</li> <li>number of NO contacts at contactor for auxiliary contacts</li> <li>number of NO contacts at contactor for auxiliary contacts</li> <li>number of NO contacts at contactor for auxiliary contacts</li> <li>number of NO contacts at contactor for auxiliary contacts</li> <li>number of total auxiliary contacts for 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> <li>at AC at 50 Hz rated value</li> <li>at AC at 50 Hz rated value</li> <li>at AC at 60 Hz rated value</li> <li>at AC at 60 Hz rated value</li> </ul>	ambient temperature [°F]	
ambient temperature  • during storage  • during operation  -20 +40 °C  -20	during storage	-22 +149 °F
<ul> <li>during storage</li> <li>during operation</li> <li>20 +40 °C</li> <li>20 +40 °C</li> <li>USA</li> <li>Horsepower ratings</li> <li>yielded mechanical performance [hp] for 3-phase AC motor</li> <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 4575/600 V rated value</li> <li>75 hp</li> <li>at 575/600 V rated value</li> <li>75 hp</li> <li>contactor</li> <li>size of 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>operational current at AC at 600 V rated value</li> <li>115 A</li> <li>mechanical service life (operating cycles) of the main contacts typical</li> <li>Auxiliary contact</li> <li>number of NC 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 Not contacts at contactor for auxiliary contacts</li> <li>number of Not contacts at contactor according to UL</li> <li>contact rating of auxiliary contacts of contactor according to UL</li> <li>coli</li> <li>type of voltage of the control supply voltage</li> <li>at AC at 60 Hz rated value</li> <li>110 V</li> <li>at AC at 60 Hz rated value</li> <li>120 V</li> </ul>	<ul> <li>during operation</li> </ul>	-4 +104 °F
<ul> <li>during operation</li> <li>country of origin</li> <li>USA</li> <li>Horsepower ratings</li> <li>yielded mechanical performance [hp] for 3-phase AC motor</li> <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>onumber of NO contacts for main contacts</li> <li>operating voltage for main current circuit at AC at 60 Hz maximum</li> <li>operational current at AC at 600 V rated value</li> <li>mechanical service life (operating cycles) of the main contacts typical</li> <li>Auxiliary contact</li> <li>number of NC 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> <li>Coil</li> <li>type of voltage of the control supply voltage</li> <li>at AC at 60 Hz rated value</li> <li>at AC at 60 Hz rated value</li> <li>110 V</li> <li>at AC at 60 Hz rated value</li> <li>120 V</li> </ul>	ambient temperature	
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 4575/600 V rated value  • at 575/600 V rated value  • at 575/600 V rated value  To 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  115 A  mechanical service life (operating 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 1 number of total auxiliary contacts maximum 7 contact rating of auxiliary contacts of contactor according to UL  Coil  type of voltage of the control supply voltage • at AC at 50 Hz rated value  110 V • at AC at 60 Hz rated value  110 V • at AC at 60 Hz rated value  110 V	during storage	-30 +65 °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 575/600 V rated value at 575/600 V rated value  To 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  115 A mechanical service life (operating 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 1 number of NO 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 7 contact rating of auxiliary contacts of contactor according to UL  Coil  type of voltage of the control supply voltage at AC at 50 Hz rated value 110 V at AC at 60 Hz rated value 110 V at AC at 60 Hz rated value 110 V	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 • at 575/600 V rated value  • at 575/600 V rated value  To 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  115 A  mechanical service life (operating 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 1 number of total auxiliary contacts maximum 7 contact rating of auxiliary contacts of contactor according to UL  Coil  type of voltage of the control supply voltage  • at AC at 50 Hz rated value  110 V  • at AC at 60 Hz rated value  120 V	country of origin	USA
at 200/208 V rated value at 220/230 V rated value at 460/480 V rated value at 460/480 V rated value r5 hp at 675/600 V rated value r5 hp  Contactor  Size 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 115 A mechanical service life (operating 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 of contacts of contacts at contactor for auxiliary contacts number of total auxiliary contacts of contacts of contacts at contactor for auxiliary contacts number of total auxiliary contacts of contactor according to UL  Coil  type of voltage of the control supply voltage at AC at 50 Hz rated value 110 V at AC at 60 Hz rated value 120 V	Horsepower ratings	
at 220/230 V rated value at 460/480 V rated value at 575/600 V rated value  To hp  Contactor  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  115 A mechanical service life (operating 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 1 number of NO contacts at contactor for auxiliary contacts 1 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  at AC at 50 Hz rated value  110 V  at AC at 60 Hz rated value  120 V	yielded mechanical performance [hp] for 3-phase AC motor	
at 460/480 V rated value     at 575/600 V rated value     75 hp  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  mechanical service life (operating 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  recontact rating of auxiliary contacts of contactor according to UL  Coil  type of voltage of the control supply voltage     at AC at 50 Hz rated value  110 V at AC at 60 Hz rated value  120 V	• at 200/208 V rated value	30 hp
otation      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 (operating 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     at AC at 50 Hz rated value  110 V  at AC at 60 Hz rated value  120 V	• at 220/230 V rated value	40 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 (operating 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  recontact rating of auxiliary contacts of contactor according to UL  type of voltage of the control supply voltage  • at AC at 50 Hz rated value  • at AC at 60 Hz rated value  120 V	• at 460/480 V rated value	75 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 (operating 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  recontact rating of auxiliary contacts of contactor according to UL  type of voltage of the control supply voltage  at AC at 50 Hz rated value  at AC at 60 Hz rated value  120 V	• at 575/600 V rated value	75 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 (operating 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  at AC at 50 Hz rated value  at AC at 60 Hz rated value  120 V	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 (operating 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  at AC at 50 Hz rated value  at AC at 60 Hz rated value  110 V  120 V	size of contactor	Controller half size 3 1/2
maximum operational current at AC at 600 V rated value mechanical service life (operating 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  • at AC at 50 Hz rated value • at AC at 60 Hz rated value  115 A 5000000  5000000  1000000  110000000  1100000000	number of NO contacts for main contacts	3
mechanical service life (operating 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  type of voltage of the control supply voltage  at AC at 50 Hz rated value  at AC at 60 Hz rated value  5000000  1000000  1000000000000000000		600 V
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  type of voltage of the control supply voltage  o at AC at 50 Hz rated value  at AC at 60 Hz rated value  120 V	operational current at AC at 600 V rated value	115 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  type of voltage of the control supply voltage  o at AC at 50 Hz rated value  120 V	( , ,	5000000
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  type of voltage of the control supply voltage  o at AC at 50 Hz rated value  at AC at 60 Hz rated value  120 V	Auxiliary contact	
number of total auxiliary contacts maximum  contact rating of auxiliary contacts of contactor according to UL  type of voltage of the control supply voltage  o at AC at 50 Hz rated value  at AC at 60 Hz rated value  120 V	number of NC contacts at contactor for auxiliary contacts	0
contact rating of auxiliary contacts of contactor according to UL  Coil  type of voltage of the control supply voltage  o at AC at 50 Hz rated value  at AC at 60 Hz rated value  10A@600VAC (A600), 5A@600VDC (P600)  AC  AC  110 V  120 V	number of NO contacts at contactor for auxiliary contacts	1
type of voltage of the control supply voltage  control supply voltage  at AC at 50 Hz rated value  at AC at 60 Hz rated value  120 V	number of total auxiliary contacts maximum	7
type of voltage of the control supply voltage  output  at AC at 50 Hz rated value  at AC at 60 Hz rated value  120 V	contact rating of auxiliary contacts of contactor according to UL	10A@600VAC (A600), 5A@600VDC (P600)
control supply voltage  • at AC at 50 Hz rated value  • at AC at 60 Hz rated value  120 V	Coil	
<ul> <li>at AC at 50 Hz rated value</li> <li>at AC at 60 Hz rated value</li> <li>110 V</li> <li>120 V</li> </ul>	type of voltage of the control supply voltage	AC
<ul> <li>at AC at 50 Hz rated value</li> <li>at AC at 60 Hz rated value</li> <li>110 V</li> <li>120 V</li> </ul>	control supply voltage	
		110 V
holding power at AC minimum 14 W	at AC at 60 Hz rated value	120 V
	holding power at AC minimum	

apparent pick-up power of magnet coil at AC	310 VA
apparent holding power of magnet coil at AC	26 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	26 41 ms
OFF-delay time	14 19 ms
Overload relay	
product function	
<ul> <li>overload protection</li> </ul>	Yes
• test function	Yes
external reset	Yes
reset function	Manual and automatic
adjustment range of thermal overload trip unit	0.85 1.15
number of NC contacts of auxiliary contacts of overload relay	3
number of NO contacts of auxiliary contacts of overload relay	0
operational current of auxiliary contacts of overload relay	
• at AC at 600 V	5 A
• at DC at 250 V	5 A
contact rating of auxiliary contacts of overload relay according to UL	5A@600VAC (B600), 5A@250VDC (P300)
Enclosure	
degree of protection NEMA rating	12
design of the housing	Extra-wide
design of the housing	dustproof and drip-proof for indoor use
Mounting/wiring	adoption and any proof of masor ado
mounting position	Vertical
fastening method	Surface mounting and installation
type of electrical connection for supply voltage line-side	Box lug
tightening torque [lbf·in] for supply	120 120 lbf-in
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 50 lbf·in
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	5 12 lbf·in
type of connectable conductor cross-sections at overload relay	2x (16 12 AWG)
at AWG cables for auxiliary contacts single or multi-stranded  temperature of the conductor at overload relay for auxiliary	75 °C
contacts maximum permissible	
material of the conductor at overload relay for auxiliary contacts	CU
Short-circuit current rating	10kA@600\/ (Closs H or K): 100kA@600\/ (Closs D 1)
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
maximum short-circuit current breaking capacity (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=US2:14IP820F81

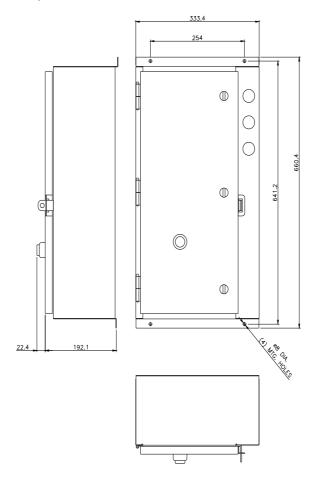
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/US/en/ps/US2:14IP820F81

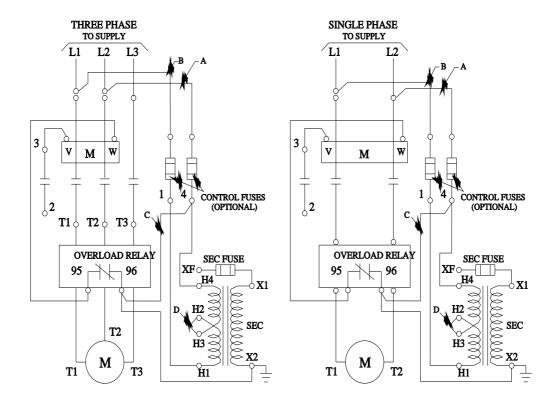
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=US2:14IP820F81&lang=en

Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/US2:14IP820F81/certificate





D46590001

last modified: 1/25/2022 🖸