

MS6™ DIGITAL SOFT STARTER

50/60 Hz, 50-1000 HP, 200~600 VAC
Optional Bypass Versions

HEAVY-DUTY RATED SOFT STARTER FOR PUMP APPLICATIONS

Keypad and LCD display for easy starter setup, status, and diagnostics

- Soft stop, up-to-speed contact, shorted SCR detection and line/load lugs standard with each unit
- Enclosed models include control power transformer
- 120 VAC control inputs for: Start/Stop/Jog/Reverse/Reset/Enable
- Two-or three-wire control allows for remote operation options
- Dry contact relay outputs for: Fault/Bypass/Running/Reverse

Operation & features

- Provides smooth current ramp output to motor, eliminating surges and equipment shock
- Adjustable ramp setting ranges (Up/Down 0-60 seconds)
- Dual operation modes to match application needs: Constant Current mode for light duty or limited power supplies and Current Ramp mode for high inertia or heavy loads
- Jog speeds: Forward at 14% of full speed, reverse at 20% of full speed
- DC injection braking option for enhanced performance

Protective functions

- Class 10~30 adjustable electronic overload
- 500% overload for 30 seconds guarantees heavy duty operation
- Single-phase protection
- Instantaneous over-current trip
- Shorted SCR fault output

Integrated bypass rated for emergency starts

- Reduces enclosure size and eliminates need for additional cooling
- Ensures reliable operation with automatic transition to bypass contactor at full speed
- Eliminates downtime in critical applications



NEMA



Franklin Electric

Digital Soft Starters (Standard Chassis)

Model No.	UL HP			Wt. (lbs)	Description
	230 V	460 V	575 V		
MS6-30-CH	10	20	30	30	MS6 Standard Chassis Soft Start, 30 A
MS6-50-CH	20	40	50	30	MS6 Standard Chassis Soft Start, 50 A
MS6-80-CH	30	60	75	30	MS6 Standard Chassis Soft Start, 80 A
MS6-125-CH	50	100	125	40	MS6 Standard Chassis Soft Start, 125 A
MS6-250-CH	100	200	250	40	MS6 Standard Chassis Soft Start, 250 A
MS6-420-CH	150	350	400	50	MS6 Standard Chassis Soft Start, 420 A
MS6-500-CH	200	400	500	93	MS6 Standard Chassis Soft Start, 500 A
MS6-600-CH	250	500	600	93	MS6 Standard Chassis Soft Start, 600 A
MS6-800-CH	300	600	800	125	MS6 Standard Chassis Soft Start, 800 A
MS6-1000-CH	400	800	1000	125	MS6 Standard Chassis Soft Start, 1000 A

Digital Soft Starters (Standard Chassis with Bypass Contactor)

Model No.	UL HP			Wt. (lbs)	Description
	230 V	460 V	575 V		
MS6B-30-CH	10	20	30	30	MS6 Standard Chassis Soft Start with Bypass, 30 A
MS6B-50-CH	20	40	50	30	MS6 Standard Chassis Soft Start with Bypass, 50 A
MS6B-80-CH	30	60	75	30	MS6 Standard Chassis Soft Start with Bypass, 80 A
MS6B-125-CH	50	100	125	60	MS6 Standard Chassis Soft Start with Bypass, 125 A
MS6B-250-CH	100	200	250	60	MS6 Standard Chassis Soft Start with Bypass, 250 A
MS6B-420-CH	150	350	400	75	MS6 Standard Chassis Soft Start with Bypass, 420 A
MS6B-500-CH	200	400	500	140	MS6 Standard Chassis Soft Start with Bypass, 500 A
MS6B-600-CH	250	500	600	140	MS6 Standard Chassis Soft Start with Bypass, 600 A
MS6B-800-CH	300	600	800	188	MS6 Standard Chassis Soft Start with Bypass, 800 A
MS6B-1000-CH	400	800	1000	188	MS6 Standard Chassis Soft Start with Bypass, 1000 A

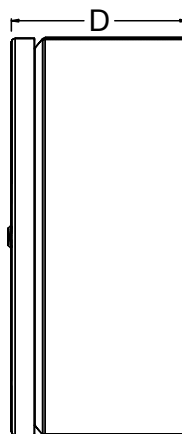
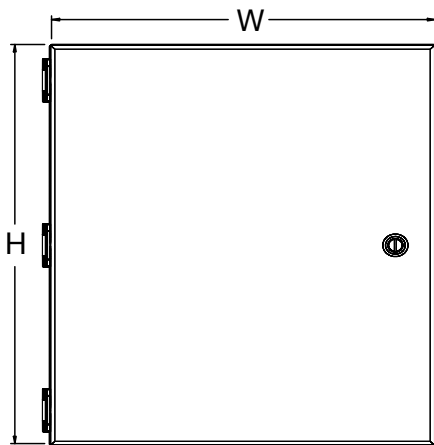
Digital Soft Starters (Enclosed, Combination) 230 - 460 V
UL/NEMA 4 Enclosures

Model No.	UL HP		Max SF Amps	Wt. (lbs)	Description
	230 V	460 V			
C4-SFS020GXX-J-PMP	10 HP	20 HP	34 A	83	N4 MS6, 20 HP, 460/3/60 w/ CB Disc, HOA, Pump Version
C4-SFS040GXX-J-PMP	20 HP	40 HP	57 A	83	N4 MS6, 40 HP, 460/3/60 w/ CB Disc, HOA, Pump Version
C4-SFS050GXX-J-PMP	25 HP	50 HP	71 A	83	N4 MS6, 50 HP, 460/3/60 w/ CB Disc, HOA, Pump Version
C4-SFS060GXX-J-PMP	30 HP	60 HP	80 A	201	N4 MS6, 60 HP, 460/3/60 w/ CB Disc, HOA, Pump Version
C4-SFS075GXX-J-PMP	40 HP	75 HP	114 A	315	N4 MS6, 75 HP, 460/3/60 w/ CB Disc, HOA, Pump Version
C4-SFS100GXX-J-PMP	-	100 HP	125 A	315	N4 MS6, 100 HP, 460/3/60 w/ CB Disc, HOA, Pump Version
C4-SFS125GXX-J-PMP	60 HP	125 HP	171 A	362	N4 MS6, 125 HP, 460/3/60 w/ CB Disc, HOA, Pump Version
C4-SFS150GXX-J-PMP	75 HP	150 HP	200 A	400	N4 MS6, 150 HP, 460/3/60 w/ CB Disc, HOA, Pump Version
C4-SFS200GXX-J-PMP	100 HP	200 HP	250 A	400	N4 MS6, 200 HP, 460/3/60 w/ CB Disc, HOA, Pump Version
C4-SFS250GXX-J-PMP	125 HP	250 HP	342 A	535	N4 MS6, 300 HP, 460/3/60 w/ CB Disc, HOA, Pump Version
C4-SFS350GXX-J-PMP	150 HP	350 HP	420 A	605	N4 MS6, 350 HP, 460/3/60 w/ CB Disc, HOA, Pump Version
C4-SFS400GXX-J-PMP	200 HP	400 HP	500 A	655	N4 MS6, 400 HP, 460/3/60 w/ CB Disc, HOA, Pump Version
C4-SFS500GXX-J-PMP	-	500 HP	600 A	655	N4 MS6, 500 HP, 460/3/60 w/ CB Disc, HOA, Pump Version

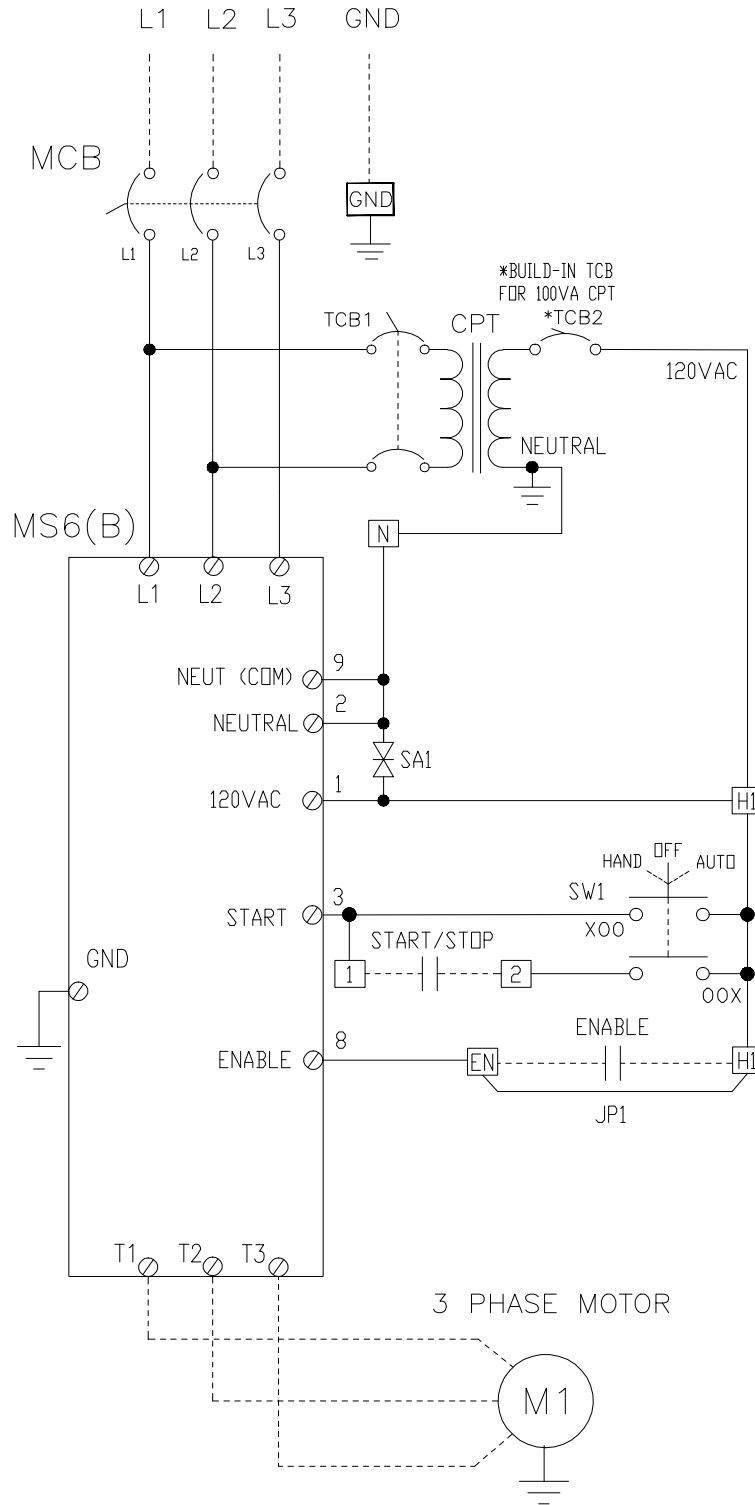
MS6 Dimensions

Starter Size	H	W	D	Description
MS6-30-CH to MS6-80-CH	17	12	10.5	Standard Chassis
MS6-125-CH to MS6-250-CH	15	15	11.5	
MS6-420-CH	19.5	15	11.5	
MS6-500-CH to MS6-600-CH	19.5	18	13	
MS6-800-CH to MS6-1000-CH	27	24	15	
MS6B-30-CH	17	12	10.5	Standard Chassis w/ Bypass Contactor
MS6B-50-CH to MS6-80-CH	21	12	10.5	
MS6B-125-CH to MS6B-250-CH	20.5	15	11.5	
MS6B-420-CH	27	15	11.5	
MS6B-500-CH to MS6B-600-CH	27	18	13	
MS6B-800-CH	35	24	15	
MS6B-1000-CH	35	24	16	UL/NEMA 4 Enclosure
C4-SFS020GXX-J-PMP to C3R-SFS050GXX-J-PMP	30	24	16	
C4-SFS060GXX-J-PMP	36	24	16	
C4-SFS075GXX-J-PMP to C4-SFS100GXX-J-PMP	42	30	16	
C4-SFS125GXX-J-PMP to C4-SFS200GXX-J-PMP	48	36	16	
C4-SFS250GXX-J-PMP to C4-SFS350GXX-J-PMP	60	36	16	
C4-SFS400GXX-J-PMP to C4-SFS500GXX-J-PMP	72	36	16	

*All measurements in inches



Wiring Diagram



Franklin Electric

400 East Spring Street, Bluffton, IN 46714
 Tel: 260.824.2900 • Fax: 260.824.2909
 www.franklin-electric.com