

Application

The Coperion K-Tron Soft Motor Starter is an economical solution designed to be used with AC electric motors. It provides an added level of protection with speed and torque control during motor start-up, extending the life of your motor. The sealed enclosure allows for installation in indoor or outdoor locations.

Design

This all-in-one solution is designed to limit the large inrush of power that is required to start electric motors. A gentle ramp up to full speed is performed by reducing the initial starting torque, temporarily reducing the current, and slowly allowing the voltage to ramp up until the motor has reached full speed. This process protects the motor from damage typically caused by influxes of power and heat allowing multiple starts per hour.

Technical Data

Standard Electrical Specifications

- Rated operational voltage: 208 to 600 VAC
- Initial voltage during startup: 40-70%
- Service factor percentage: 100%
- Disconnect: Lockable rotary style through the door
- Enclosure rating: IP66, NEMA 4/12
- Polyester powder painted: ANSI 61 grey
- Wall-mount brackets
- Starters 5714-31 thru 5714-34
 - Control circuit voltage: 24 VDC
 - Degree of protection:
 - Main circuit IP10
 - Control circuit IP20
 - Overload protection: Motor circuit controller
- Starters 5714-35 thru 5714-37
 - Control circuit voltage: 100-240 VAC, 50/60Hz
 - Includes additional control relay for 24 VDC
 - Degree of protection:
 - Main circuit IP00
 - Control circuit IP20
 - Overload protection: Fused disconnect

Temperature Limits

- Ambient air temperature:
 - Storage -40 to 70°C [-40 to 158°F]
 - Operation -25 to 60°C [-13 to 140°F]

Options

Enclosure

- Stainless steel NEMA 4X

Hazardous Locations:

- NEC options available
- Enclosure purge kit

Communications:

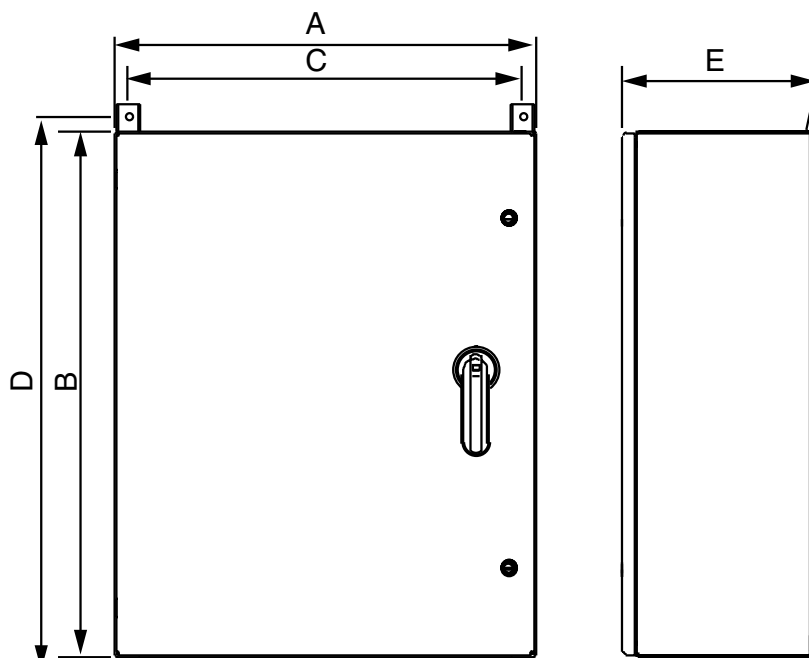
- Fieldbus

Certifications:

- UL508A



Dimensions mm [in]



Part No.	A	B	C	D	E
5714-31	304.8 [12]	406.4 [16]	266.7 [10.5]	446 [17.56]	223.5 [8.8]
5714-32	304.8 [12]	406.4 [16]	266.7 [10.5]	446 [17.56]	223.5 [8.8]
5714-33	304.8 [12]	406.4 [16]	266.7 [10.5]	446 [17.56]	223.5 [8.8]
5714-34	304.8 [12]	406.4 [16]	266.7 [10.5]	446 [17.56]	223.5 [8.8]
5714-35	609.6 [24]	762 [30]	571.5 [22.5]	801.6 [31.56]	274.3 [10.8]
5714-36	609.6 [24]	762 [30]	571.5 [22.5]	801.6 [31.56]	274.3 [10.8]
5714-37	762 [30]	914.4 [36]	723.9 [28.5]	954 [37.56]	325.1 [12.8]

Part No.	Amp Range	550-600 VAC		440-480 VAC		380-415 VAC		220-240 VAC		208 VAC	
		kW [HP]	Full Load AMP	kW [HP]	Full Load AMP	kW [HP]	Full Load AMP	kW [HP]	Full Load AMP	kW [HP]	Full Load AMP
5714-31	40-54	30 [40] 37 [50]	41 52	30 [40]	52	19 [25] 22 [30]	44 51	11 [15]	42	11 [15]	46.2
5714-32	57-75	45 [60]	62	37 [50]	65	30 [40]	66	15 [20] 19 [25]	54 68	15 [20]	59.4
5714-33	70-90	56 [75]	77	45 [60]	77	37 [50]	83	22 [30]	80	19 [25]	74.8
5714-34	80-100	75 [100]	99	56 [75]	96	-	-	-	-	22 [30]	88
5714-35	100-143	93 [125]	125	75 [100]	125	45 [60] 56 [75]	103 128	30 [40] 37 [50]	104 130	30 [40]	120
5714-36	143-171	112 [150]	144	93 [125]	156	75 [100]	165	45 [60]	154	37 [50]	150
5714-37	171-210	149 [200]	192	112 [150]	180	93 [125]	208	56 [75]	192	45 [60]	177

Caution: Measurements are for general reference only. Please consult dimensional drawing for exact measurements.