

# DC590+ Size 6

## High Power DC System Drive



## Description

The Parker SSD High Power DC590+ System Drive is among the smallest drives of that rating available on the market.

Supplied in modules to mount directly on your panel, or as a pre-mounted DRV model, it is easy to install and service. Highly versatile, the drive can be wired with top or bottom AC power supply input as well as left or right DC exit.

The DC590+ size 6 has been designed for optimum reliability and efficiency. To save energy and maximize life, the fans are only switched on when required. Built-in snubbers allow a reliable operation even with poor quality power. Like the whole DC590+ family, the size 6 is open to popular industrial protocols, including Ethernet, ProfiBus and DeviceNet, with available option cards. It comes with a full set of handy function blocks dedicated to section control which virtually eliminates the need for an external PLC.



## Contact Information

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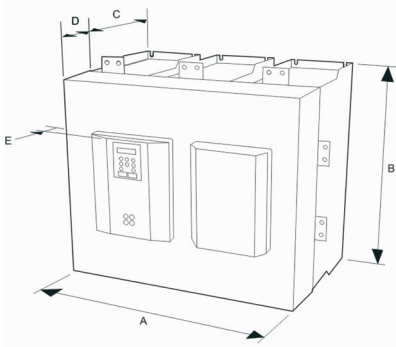
## Product Features

- 2-quadrant or 4-quadrant regenerative variants
- Armature current ratings
  - 1250A with overload and 1350A no overload. 750 HP @ 500Vdc
  - 1600A with overload and 1750A no overload. 1000 HP @ 500Vdc
  - 1950A with overload and 2150A no overload. 1250 HP @ 500Vdc
- Built-in 60A field current controller
- Voltage ratings :
  - 380/415/460/500/575/690 VAC
- Series 2 32-bit control architecture
- Overload :
  - 150% for 30 seconds
  - 200% for 10 seconds.
- Speed feedback : analog tach, incremental encoder
- Versatile installation :
  - Bottom or top power supply entry
  - Left or right DC motor exit
- Built-in fuses
- Built-in snubbers for AC line and thyristors
- Meets CE

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# Specifications

## Dimensions



A	B	C	D	E
686 (27.00)	715 (28.15)	378 (14.88)	62 (2.44)	57 (2.24)

Dimensions are in mm (inches)

## How to order

The DC590+ size 6 can be ordered as other frames of the DC590+ series, just by using the new current ratings :

1250A, 1600A, 1950A

Ex : 590P/1250/690/...

You will receive a package containing :

- Three Phase Assemblies
- One Control Assembly

The DRV version will include a DC contactor and control transformer.

## Options

DeviceNet Techbox  
 Profibus Techbox  
 ControlNet Techbox  
 Ethernet Techbox  
 ModBus Plus Techbox  
 RS485/Modbus Techbox  
 Remote keypad mounting kit  
 AC/DC Tach Feedback  
 Encoder Feedback  
 Microtach Feedback

## Electrical ratings

### Power circuit

Output Current	Output Current	Power	Motor HP	Field	Total Losses	Symmetrical
150% x 30sec	100%	@ 500V dc	@ 500V dc	Current	@ Full Load	Fault current
200% x 10sec	Continuous					rms
(Amps)	(Amps)	(kW)	(HP)	(Amps)	(W)	(kAmps)
1250	1350	600	800	60	4600	100
1600	1750	750	1000	60	5000	100
1950	2150	900	1200	60	6000	100

### Power supply

3-Phase Supply	HV Build	Frame 6	690V ac $\pm 10\%$ , 50/60Hz $\pm 5\%$ , line-to-line, ground referenced (TN) and non-ground referenced (IT)
	MV Build	Frame 6	500V ac $\pm 10\%$ , 50/60Hz $\pm 5\%$ , line-to-line, ground referenced (TN) and non-ground referenced (IT)
3 Phase Input		3-phase	Rotation insensitive, no adjustment necessary for frequency change

### Auxiliary supply

Auxiliary Supply	115-230V $\pm 10\%$ , 50-60Hz $\pm 10\%$ , single phase, Overvoltage Category II
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## Typical system installation



A typical system installation includes circuit breaker, choke, contactor, and control logic. Parker SSD offers integrated systems through the factory and a network of local authorized integrators.