

CST™ 280 Series

Issued Aug. 2015 • Index No. DC/29.55

**Stick/TIG Welding
Power Source**



Quick Specs



Industrial Applications

Power plant construction
Petrochemical construction
Maintenance and repair
Shipbuilding

Processes

Stick (SMAW)
TIG (GTAW) Lift-Arc™

Input Power Requires 3- or 1-phase power

Amperage Range TIG: 5–280 A, stick: 30–280 A

Max. Open-Circuit Voltage 77 VDC

Net Weight 41 lb. (18.6 kg)

Superior stick arc performance
even on the difficult-to-run
electrodes like E6010.

Adaptive Hot Start™ for stick
arc starts automatically
increases the output amperage
at the start of a weld should the
start require it. Prevents the
electrode from sticking.

Lift-Arc™ start provides TIG
arc starting without the use
of high frequency.



**Simple voltage-changeover
switch** saves time when
changing primary voltage. Input
voltage can be changed without
removal from inverter rack or
removal of machine case.



CST 280

CST 280 with Meter



New!

**NEW! Optional digital
meter** for more precise
control when presetting or
monitoring welding
amperage.

Portable in the shop or at
the jobsite — at 41 pounds
the CST 280 is easily moved
from location to location.

Remote amperage control
provided through 14-pin
receptacle on front of the
machine. This permits
use of standard remote
amperage control devices.

Fan-On-Demand™ cooling
system operates only when
needed, providing power
efficiency and noise
reduction.

**Six-foot power cable
included.**

Rack mountable for
protection, storage and
transportation of multiple
power sources while using a
single primary power cable.



Power source is warranted for three years, parts and labor.
Original main power rectified parts are warranted for five years.



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An ITW Welding Company
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Appleton, WI 54912-1079 USA

Equipment Sales US and Canada
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MillerWelds.com



Specifications (Subject to change without notice.)



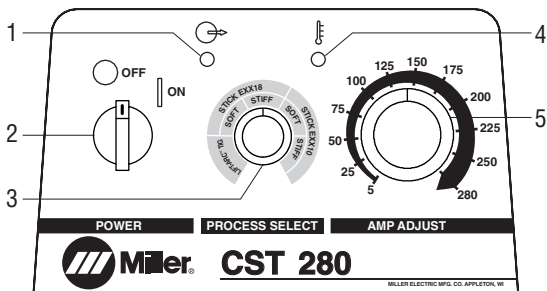
Description	Welding Mode	Input Power	Rated Output	Welding Amperage Range	Max. Open-Circuit Voltage	Amps Input at Rated Load Output, 50/60 Hz 208 V 220 V 230 V 400 V 440 V 460 V 575 V								KVA	KW	Dimensions	Net Weight
CST 280, 220–230/460–575 V	Stick (SMAW) TIG (GTAW)	Three-phase	280 A at 31.2 VDC, 35% duty cycle	5–280 A	77 VDC	—	35	34.2	—	—	17.8	14.7	14.6	10.2	H: 13.5 in. (343 mm) W: 7.5 in. (191 mm) D: 18 in. (457 mm)	41 lb. (18.6 kg)	
			200 A at 28 VDC, 100% duty cycle			—	23.3	22.5	—	—	11.7	9.7	9.6	6.4			
		Single-phase	200 A at 28 VDC, 50% duty cycle*	5–200 A		—	43.9	43	—	—	—	—	10.1	6.6			
			150 A at 26 VDC, 100% duty cycle*			—	32.7	32	—	—	—	—	7.3	4.6			
CST 280, 208–230/400–460 V	Stick (SMAW) TIG (GTAW)	Three-phase	280 A at 31.2 VDC, 35% duty cycle	5–280 A	67 VDC	36	—	34	19.8	18	17.5	—	14	10.2	H: 13.5 in. (343 mm) W: 7.5 in. (191 mm) D: 18 in. (457 mm)	41 lb. (18.6 kg)	
			200 A at 28 VDC, 100% duty cycle			23.5	—	22.8	13.5	12	12.7	—	10.2	6.9			
		Single-phase	200 A at 28 VDC, 50% duty cycle*	5–200 A		43.9	—	43	—	—	—	—	9.9	6.5			
			150 A at 26 VDC, 100% duty cycle*			35	—	32.9	—	—	—	—	7.6	4.8			

* Output ratings on 230 V single-phase are reduced to comply with CSA current limitation on input power cable.

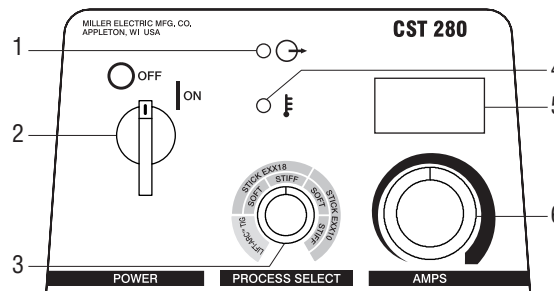


Certified by Canadian Standards Association to both the Canadian and U.S. Standards. 1P23M approval.

Control Panel



CST 280

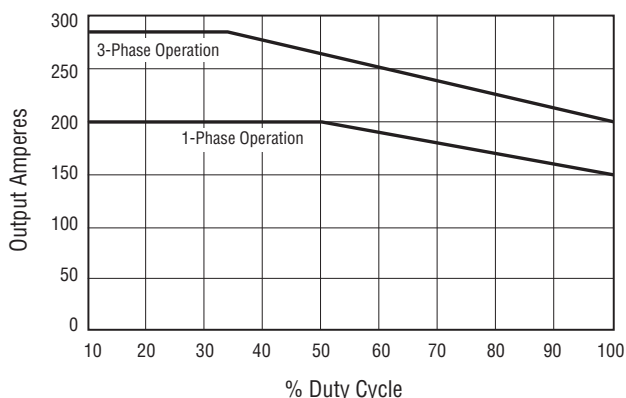


CST 280 with Meter

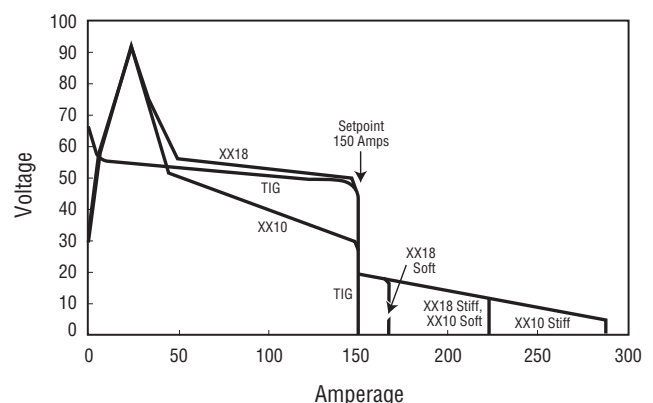
1. Output Light
2. On/Off Switch
3. Weld Process Selector Switch
4. Overtemp Light
5. Digital Meter Display
6. Amperage Adjustment Control

Performance Data

Duty Cycle Chart



Volt/Amp Curve At 150 Amps



Genuine Miller® Accessories

TIG (GTAW) Torches



Weldcraft™ TIG Torches

The Weldcraft line of air-cooled and water-cooled TIG torches complements the most popular TIG power source line available today.

A-150 Valve

#WP-17V-12-2 12 ft. (3.7 m)

#WP-17V-25-2 25 ft. (7.6 m)

150-amp air-cooled torch with valve and two-piece cable.

A-200 Valve

#WP-26V-12-2 12 ft. (3.7 m)

#WP-26V-25-2 25 ft. (7.6 m)

200-amp air-cooled torch with valve and two-piece cable.

These two-piece-cable TIG torches require the installation of a Dinse-style connector (#042 418) or Tweco-style connector (#191 981) depending on the CST model connector type.

Remote Controls



RCC-14 Remote Contactor and Current Control* #151 086

East/west rotary-motion fingertip control attaches to TIG torch using two hook-and-loop fasteners. Includes 26.5-foot (8 m) cord and 14-pin plug.



RCCS-14 Remote Contactor and Current Control* #043 688

North/south rotary-motion fingertip control attaches to TIG torch using two hook-and-loop fasteners. Includes 26.5-foot (8 m) cord and 14-pin plug.



RHC-14 Hand Control*

#242 211 020 20 ft. (6 m)

#242 211 100 100 ft. (30.5 m)

Miniature hand control for remote current and contactor control. Dimensions: 4 x 4 x 3.25 inches (102 x 102 x 82 mm). Includes cord and 14-pin plug.



RFCS-14 Foot Control* #043 554

Foot pedal provides remote current and contactor control. Includes 20-foot (6 m) cord and 14-pin plug.



RFCS-14 HD Foot Control* #194 744

Heavy-duty foot pedal current and contactor control with increased stability and durability from larger base and heavier cord. Reconfigurable cord can exit front, back or either side of the pedal for flexibility. Includes 20-foot (6 m) cord and 14-pin plug.



Wireless Remote Foot Control* #300 429

For remote current and contactor control. Receiver plugs directly into the 14-pin receptacle of Miller machine.

90-foot (27.4 m) operating range.



Wireless Remote Hand Control* #300 430

For remote current and contactor control. Receiver plugs directly into the 14-pin receptacle of Miller machine. 300-foot (91.4 m) operating range.

Extension Cables for 14-Pin Remote Controls

#242 208 025 25 ft. (7.6 m)

#242 208 050 50 ft. (15.2 m)

#242 208 080 80 ft. (24.4 m)

**The remote controls provide amperage control only on the CST 280, no remote contactor control.*

Cable Connectors and Adapters

Note: The Dinse version of the CST 280 includes one set of male connectors. The Tweco version does not.

Dinse-Style Connector #042 418

Accepts #4 AWG to #1/0 cable size. Required if male plugs shipped with power source must be replaced or if additional plugs are needed. Kit includes one Dinse-style male plug which attaches to the work and/or weld cables and plugs into the Dinse-style receptacles on the power source.

Extension Kit for Dinse-Style Cable Connectors #042 419

Accepts #4 AWG to #1/0 size cable. Used to adapt or extend weld and/or work cables. Kit includes one male Dinse-style plug and one in-line female Dinse-style receptacle.



on one end and a female Tweco receptacle (for weld cable connection) on other end.



one end and a Cam-Lok receptacle (for weld cable connection) on other end.

Dinse/Tweco® Adapter #042 465

A one-piece adapter which has a Dinse-style male plug (to power source)

Dinse/Cam-Lok Adapter #042 466

A one-piece adapter which has a Dinse-style male plug (to power source) on



on one end and a female Dinse-style receptacle (for weld cable connection) on other end.



includes one Tweco-style male plug which attaches to the work and/or weld cables and plugs into the receptacle on the power source.

Tweco®/Dinse Adapter #210 061

A one-piece adapter which has a Tweco-style male plug (to power source)

Tweco®-Style Connector #191 981

Accepts 1/0 to 2/0 size cable. Kit

CST™ 280 Rack (See Index No. DC/18.82 for additional information.)



Shown with
optional
running gear.

- The rack provides a simple means of protecting and transporting welding power sources for construction, power plant turn-arounds and shipbuilding applications.
- The CST™ 280 Rack's low weight (340 pounds fully loaded) enables use of elevators to move rack.
- Top cover to protect the machines from falling debris.
- Meets NEC requirements with appropriate fuses.
- Lift truck side and end fork pockets.
- Lifting eye simplifies transportation using crane or overhead lifting device.
- One main disconnect box with fused circuit breaker switches for each machine.
- Common output ground connection (for same polarity use only).
- CSTs can be paralleled for air carbon arc gouging.
- Running gear (optional).

CST Rack Specifications

Power Source	Input Power to Rack	Capacity	Dimensions	Net Weight
CST 280	Three-phase, 220–230/460–575 V, 50/60 Hz	4	H: 50.75 in. (1,289 mm) 4-pack W: 25.5 in. (648 mm)	355 lb. (161 kg)
		8	8-pack W: 46 in. (1,165 mm) D: 26.5 in. (673 mm)	640 lb. (290 kg)

Ordering Information

Note: The Dinse version of the CST 280 includes one set of male connectors. The Tweco version does not.

Power Source and Options	Stock No.	Description	Qty.	Price
CST™ 280 220–230/460–575 V	#907 244	Dinse-style connectors		
	#907 244 011	Tweco®-style connectors		
	#907 696	Tweco®-style connectors with meter		
CST™ 280 208–230/400–460 V	#907 251	Dinse-style connectors		
	#907 251 011	Tweco®-style connectors		
	#907 251 012	Dinse-style connectors with VRD capability		
	#907 563	Dinse-style connectors with meter		
	#907 563 001	Dinse-style connectors with meter and VRD capability		
Power Source Racks and Options				
CST™ 280 Rack 220–230/460–575 V	#907 245	4-pack rack, Dinse-style connectors		
	#907 247	4-pack rack, Tweco®-style connectors		
	#907 365	8-pack rack, Tweco®-style connectors		
CST™ 280 Rack 208–230/400–460 V	#907 246	4-pack rack, Dinse-style connectors with VRD capability		
Empty Rack	#195 051 #300 580	4-pack rack, rack only 8-pack rack, rack only		
Running Gear for Rack	#195 114 #195 436	For 4-pack rack For 8-pack rack		
Fuse	#199 795 #212 541	30 A fuse for 220 or 230 V input (order 12 per 4-pack rack or 24 per 8-pack rack) 20 A fuse for 575 V input (order 12 per 4-pack rack or 24 per 8-pack rack)		
Weldcraft™ TIG Torches		See page 3		
Remote Controls		See page 3		
Cable Connectors and Adapters				
Dinse-Style Connector	#042 418	#4 to #1/0 AWG cable size		
Extension Kit for Dinse-Style Connector	#042 419	#4 to #1/0 AWG cable size		
Dinse/Tweco® Adapter	#042 465	One-piece adapter with Dinse-style male plug and Tweco-style female receptacle		
Dinse/Cam-Lok Adapter	#042 466	One-piece adapter with Dinse-style male plug and Cam-Lok receptacle		
Tweco®/Dinse Adapter	#210 061	One-piece adapter with Tweco-style male plug and Dinse-style female receptacle		
Tweco®-Style Connector	#191 981	#1/0 to #2/0 AWG cable size		

Date:

Total Quoted Price:

Distributed by:

