

Dimension™ 650 and 650 ArcReach®

See literature DC/19.3

Developed for harsh environmental conditions and output requirements that range from power-intensive to precise.



Dimension 650 ArcReach power source shown with ArcReach SuitCase 12 feeder and ArcReach Stick/TIG Remote (all sold separately). Feeder includes Bernard BTB Gun 300 A OR S-Gun™ with reversible dual size (.045 and 1/16 in.) V-knurl drive rolls.

ArcReach®

Every year, outdated welding equipment wastes hundreds of productive work hours – and thousands of dollars in profit – by forcing operators to make numerous walks from the weld joint to the welder. Welding systems with ArcReach technology let operators adjust welding parameters right at the weld joint without a control cord using the wire feeder or remote – maximizing arc-on time, improving safety and impacting the bottom line. See pages 18/47 for ArcReach SuitCase feeders and page 47 for the Stick/TIG Remote. **Don't walk. Weld!** Learn more at MillerWelds.com/arcreach

Note: Dimension 650 ArcReach does not support the Cable Length Compensation (CLC™) and Adjust While Welding (AWW™) features or the ArcReach Smart Feeder.

All aluminum construction helps the machine resist corrosion for long life.

Exclusive protection input inductor protects machine's performance and reliability from "dirty" input power.

Wind Tunnel Technology™ Internal air flow that protects components, greatly improving reliability.

Fan-On-Demand™ cooling system only operates when needed, reducing power consumption and keeping internal components cleaner.

High-quality performance in all welding processes, from thick to thin metals.

Arc control available in the stick and wire modes for easier fine tuning of tough-to-weld materials and out-of-position applications.

Reduced size and weight results in an easier-to-handle package that exceeds the welding performance of larger, heavier machines. Dimension 650 is 3.5 times lighter than the Dimension 652 and also uses 40 percent less floor space.

High electrical efficiency and excellent power factor mean that you can get more welding done using less power. Dimension 650 uses up to 32 percent less amperage than the Dimension 652.

Heavy industrial   

Processes

- MIG (GMAW) ▪ Flux-cored (FCAW)
- Stick (SMAW) ▪ TIG (GTAW)
- Submerged arc (SAW)
- Air carbon arc cutting and gouging (CAC-A) (rated 3/8 in. carbons)

Dimension 650 Stationary package includes

- Power source
- S-74 MPa Plus feeder with Bernard® BTB Gun 400 A and .035/.045 in. drive rolls
- Industrial MIG 4/0 kit consisting of flowmeter regulator with 10 ft. (3 m) gas hose, 10 ft. (3 m) 4/0 feeder weld cable with lugs, and 15 ft. (4.6 m) work cable with 600-amp C-clamp

Dimension 650 MIGRunner™ package includes above plus

- Running gear cylinder rack

Most popular accessories



▪ Dimension 650 ArcReach® Rack 907701

- Comes assembled with four Dimension 650 ArcReach power sources fused for 460 volts
- ArcReach® SuitCase® Feeders (pg 18/47)
- 70 Series Feeders (pg 20)
- Bernard® MIG Guns (pg 25-26)
- ArcReach® Stick/TIG Remote 301325 (pg 47) (for ArcReach model only)
- Running Gear Cylinder Rack 300408 (pg 119)
- Industrial MIG 4/0 Kit (with lug connectors) 300390 (pg 121)
- Extension Cables (pg 126)
 - 242208025 25 ft. (7.6 m)
 - 242208050 50 ft. (15 m)
 - 242208080 80 ft. (24.4 m)

Visit MillerWelds.com or your distributor for other Miller® options and accessories.

*Dimension 650 with 575-volt input is 60 Hz only.

Model/Stock Number	Amperage/Voltage Ranges	Rated Output	Amps Input at Rated Output, 50/60 Hz	Max. Open-Circuit Voltage	Power Source Dimensions (Includes lift eye)	Power Source Net Weight
Dimension 650 (907617) 380/460 V power source only (951638) 380/460 V stationary package (951637) 380/460 V MIGRunner package	CC mode: 10-815 A CV mode: 10-44 V SAW mode: 10-65 V	650 A at 44 VDC, 100% duty cycle	380 V 460 V 575 V* KVA KW 53.2 42.8 34.3 34 30.7	87 VDC	H: 28.187 in. (716 mm) W: 16.687 in. (424 mm) D: 31.625 in. (803 mm)	158 lb. (71.7 kg)
Dimension 650 ArcReach (907617001) 380/460 V power source only (907809) 575 V* power source only						

DONT WALK WELD™

ArcReach® WELDING SYSTEMS

**The more they walk
the more it costs.**



ARCREACH PLUG-IN POWER SOURCES

XMT® 350 FieldPro™ Systems pg 44

Exceptional arc performance maximizes weld quality, minimizes defects.

XMT® 350 FieldPro™ Systems with Polarity Reversing pg 44

Provides outstanding stick and TIG performance for pipe welding, including automatic polarity selection.

XMT® 450 CC/CV ArcReach®* pg 45

Portability and excellent arc performance with flexibility and simplicity.

Dimension™ 650 ArcReach®** pg 46

For harsh environments and a wide range of output requirements.



ARCREACH ENGINE-DRIVEN POWER SOURCES

Trailblazer® 325 ArcReach® Models** pg 78

Unbeatable arc performance with superior runtimes and increased fuel efficiency.

Big Blue® ArcReach® Models** pg 81–84

Tackle tough jobs that require high output for welding, gouging and aux power.



ARCREACH WIRE FEEDERS

ArcReach® SuitCase® Feeders pg 18

For all ArcReach power sources. For MIG and flux-cored welding. Features remote voltage control and Auto-Process Select™.

ArcReach® Smart Feeder pg 18

For both XMT 350 FieldPro models and all ArcReach engine drives. For RMD® and pulsed MIG welding up to 200 feet from the power source.



ARCREACH STICK/TIG REMOTES

ArcReach® Stick/TIG Remote 301325

For all ArcReach power sources except XMT 350 FieldPro with Polarity Reversing. Features remote amperage control, arc control for stick and Auto-Process Select.

ArcReach® Stick/TIG Remote with Polarity Reversing 300934

For XMT 350 FieldPro with Polarity Reversing power source only. Provides remote control functionality of the XMT 350 FieldPro with Polarity Reversing hundreds of feet from the power source, including process changeover and amperage adjustment — with no special cables.

ArcReach® HEATING SYSTEMS

**Allows economical,
insourced weld preheating.**



ARCREACH HEATER AIR-COOLED INDUCTION SYSTEM

ArcReach® Heater and Tools pg 92

For all ArcReach power sources except XMT 450 CC/CV ArcReach and Dimension 650 ArcReach. Designed for preheating and bakeout applications up to 600 degrees Fahrenheit. Induction heating tools (air-cooled cables or air-cooled quick wraps) connect to the heater which is powered by an ArcReach power source.

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