

# **THERMAL ARC**®

A THERMADYNE® Company

## **THERMAL ARC**® EXCEL-ARC® 6045 CC/CV THREE PHASE 450 AMPERE CONSTANT VOLTAGE; 400 AMPERE CONSTANT CURRENT.



The Thermal Arc® EXCEL-ARC® 6045 CC/CV is a combination stick and wire machine in one case. No sacrifices were made to either process. The digital meter is standard for preset welding conditions. A locking switch keeps the machine locked into the CC or CV mode, preventing any chance of slipping into a different mode while welding. All controls necessary to operate either process are on the front panel. All feeder connections and auxiliary power connections are on the rear panel keeping the front panel open for easy operator visibility. This user friendly unit is adaptable for input voltage from 200 through 575 volts on 60 Hz and 230/400 volts on 50 Hz. The input connections are easily connected. Arc characteristics are unsurpassed in terms of quality. Stick electrodes are easily run at low amperages.



**MORE POWER TO YOU™**

# FEATURES/BENEFITS

**Solid State Control.** Gives closed loop voltage regulation on a single, protected, reliable (CAD) circuit board.

**Volt and Amp Meters Standard.**

**Single Range Voltage Control.** Entire unit output controlled by one low voltage potentiometer.

**Built-In Wire Sharpening**

**Solid State Welding Contactor.** Provides long life in repetitive welding applications.

**Output Voltage Regulation.** (line voltage compensation). Unit automatically monitors output voltage and makes required changes to compensate for line voltage fluctuation, machine drift, etc.

**Built-In Overload Protection.** Thermal overload with automatic reset on heat sink. Electronic overload circuit protects the SCR units against a shorted output.

**Exceptional Dynamic Response.** Gives superior low-end characteristics, arc starting and recovery.

**Environmental Protection.** All transformers, reactors and PC boards are dipped in sealant material to provide reliability in harsh environments.

**Designed for Ease of Maintenance.** All components are easily accessible and can be removed with normal hand tools. All control circuits are on one PC board. All connections to this board are made with multiple pin plugs.

**Arc Force Control.** Allows operator to dial in his arc characteristics.

**Fan Thermostat Standard.** Fan runs on demand.

# AVAILABLE FILLER METALS

The high quality line of Thermal Arc filler metals meet a wide variety of application needs. Please contact Customer Service for more detailed information.

www.thermalarc.com  
www.thermadyne.com

# SPECIFICATIONS

OUTPUT RATING 60 Hz	Range	CV	CC	Range
Welding Amps	50-600	450	400	40-500
Volts	13-40	38	36	
Duty Cycle		100%	60%	

OUTPUT RATING 50 Hz	Range	CV	CC	Range
Welding Amps	50-600	450	500	40-600
Volts	13-40	38	40	
Duty Cycle		100%	40%	

**AUXILIARY POWER DUPLEX RECEPTACLE**  
9 amps, 115VAC (circuit breaker protected for wire feeder and control)

INPUT RATING	60 Hz				50 Hz	
	200	230	460	575	230	400
Line Voltage						
Line Amps						
at rated load	87	76	38	30	77	44
at no load	6.9	6.0	3.0	2.4	3.0	1.8
Phase	3	3	3	3	3	3
Hertz	60	60	60	60	50/60	50/60
KVA	30.1	30.1	30.1	30.1	30.5	30.5
Power Factor At						
Rated Load	.75	.75	.75	.75	.8	.8

**DIMENSIONS**

Length	.31 in. (787 mm)
Width	.21-1/4 in. (540 mm)
Height with lifting eye	.29-7/16 in. (748 mm)
Weight	.510 lbs. (232 kg)
Approvals	(60 Hz Model) NEMA EW-1, CSA
	(50/60 Hz Model) NEMA EW-1, CE, IEC 974-1

# ORDERING INFORMATION

EXCEL-ARC 6045 CC/CV, 200/230/460/575, 3 phase, 60 Hz, 500015A-003

EXCEL-ARC 6045 CC/CV, 230/400, 3 phase, 50/60 Hz, 100002-003

Wire feeder compatibility: Model 17A, Porta-Feed 17A, 2210, 2410, Hefty CC/CV, Dual 2000, Digital 2000, Dual Digital 2000, all automatic panels.

Options:

Portable mounting w/o bottle rack 910230B-009

Portable mounting w/ bottle rack 910230B-008

Foot control 200460-007

Remote hand control

492330-009 25'

492330-010 50'

492330-011 100'

Male cable connector 203032

WORLD HEADQUARTERS: 101 S. Hanley • St. Louis, MO 63105 • 314-721-5573 • FAX 314-721-4822

**THERMADYNE®**



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## International Offices

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