

CUTMASTER™ 15SERIES™ Family of Plasma Cutting Systems



Specifications

	CUTMASTER 38	CUTMASTER 51	CUTMASTER 81	CUTMASTER 101	CUTMASTER 151
SYSTEMS					
Cut Capacity	Genuine 3/8" (10mm) Maximum 1/2" (13mm) Severance 5/8" (16mm) Pierce 1/4" (6mm)	Genuine 1/2" (13mm) Maximum 5/8" (16mm) Severance 3/4" (20mm) Pierce 3/8" (10mm)	Genuine 7/8" (22mm) Maximum 1" (25mm) Severance 1-1/4" (32mm) Pierce 1/2" (13mm)	Genuine 1" (25mm) Maximum 1-1/4" (32mm) Severance 1-1/2" (38mm) Pierce 3/4" (20mm)	Genuine 1-1/4" (32mm) Maximum 1-1/2" (38mm) Severance 1-3/4" (45mm) Pierce 7/8" (22mm)
Output Current	20 – 30 Amps, Adjustable	20 – 40 Amps, Adjustable	20 – 60 Amps, Adjustable	20 – 80 Amps, Adjustable	25 – 100 Amps, Adjustable
Input Power	120-230V, 1 ph, 50/60 Hz, 29/17 Amps	208/230V, 1 ph, 50/60 Hz, 39 / 37 Amps 400V, 3 ph, 50/60 Hz, 12 Amps 460V, 1/3 ph, 50/60 Hz, 18 / 12 Amps	208/230V, 1 ph, 50/60 Hz, 57 / 52 Amps 400V, 3 ph, 50/60 Hz, 16 Amps 460V, 1/3 ph, 50/60 Hz, 27 / 17 Amps 600V, 3 ph, 50/60 Hz, 10 Amps	208/230V, 1 ph, 50/60 Hz, 74 / 67 Amps 400V, 3 ph, 50/60 Hz, 20 Amps 460V, 1/3 ph, 50/60 Hz, 34 / 20 Amps 600V, 3 ph, 50/60 Hz, 13 Amps	208/230V ±10%, 1 ph, 50/60 Hz, 92/87A 400V ±10%, 3 ph, 50 Hz, 26 Amps 460V ±10%, 1/3 ph, 60 Hz, 46/24 Amps 600V ±10%, 3 ph, 60 Hz, 16 Amps
Input Power Cable	10' (3m) with 20 Amp Plug (120V)	10' (3m) with Plug (208/230V) 6' (2m) without Plug (400V) 10' (3m) without Plug (460V)	10' (3m) with Plug (208/230V) 6' (2m) without Plug (400V) 10' (3m) without Plug (460V & 600V)	10' (3m) with Plug (208/230V) 6' (2m) without Plug (400V) 10' (3m) without Plug (460V & 600V)	10' (3m) with Plug (208/230V) 6' (2m) without Plug (400V) 10' (3m) without Plug (460V & 600V)
Work Cable	20' (6.1m)	20' (6.1m)	20' (6.1m)	20' (6.1m)	20' (6.1m)
Duty Cycle	35% @ 30A	40% @ 40A	50% @ 60A, 100% @ 45A	40% @ 80A, 100% @ 45A	104°F (40°C) 40% @ 100A @ 120 VDC 100% @ 50A @ 98 VDC 68°F (20°C) 75% @ 100A @ 120VDC
Dimensions	Length 21" (533mm) Width 10" (254mm) Height 15.75" (400mm)	Length 22.5" (572mm) Width 10.8" (273mm) Height 16.4" (416mm)	Length 27.4" (696mm) Width 12.4" (315mm) Height 18" (457mm)	Length 27.4" (696mm) Width 12.4" (315mm) Height 18" (457mm)	Length 27.4" (696mm) Width 12.4" (315mm) Height 18" (457mm)
Weight	43 lbs. (19.5 kg) (Unit, Power Cable, Torch & Leads)	58 lbs. (26.3 kg) (Unit, Power Cable, Torch & Leads)	83 lbs. (37.6 kg) (Unit, Power Cable, Torch & Leads)	83 lbs. (37.6 kg) (Unit, Power Cable, Torch & Leads)	83 lbs. (37.6 kg) (Unit, Power Cable, Torch & Leads)
Ship Weight	53 lbs. (24 kg)	72 lbs. (32.7 kg)	105 lbs. (47.6 kg)	105 lbs. (47.6 kg)	105 lbs. (47.6 kg)
TORCH					
Model	1Torch® SL60™ (hand)	1Torch® SL60™ (hand) & SL100™ (machine)	1Torch® SL60™ (hand) & SL100™ (machine)	1Torch® SL100™ (hand) & SL100™ (machine)	1Torch® SL100™ (hand) & SL100™ (machine)
Lead Length	Hand Torch - 20' (6.1m) Only		Hand Torch - 20' (6.1m) or 50' (15.2m) / Machine Torch - 25' (7.6m) or 50' (15.2m)		
Gas	Air	Air	Air	Air	Air
Gas Pressure	65 psi (4.6 bar)	75 psi (5.2 bar)	70 psi (4.8 bar)	70 psi (4.8 bar)	70 psi (4.8 bar)
Gas flow	5 cfm (142 lpm)	5.8 cfm (165 lpm)	6.7 cfm (189 lpm)	6.7 cfm (189 lpm)	7.5 cfm (212 lpm)
Pilot	Start Cartridge	Start Cartridge	Start Cartridge	Start Cartridge	Start Cartridge
Control	Hand Torch Switch			Hand Torch Switch or Hand Pendant Control	
APPLICATION INFORMATION					
Suitable Materials	Aluminum, Stainless Steel, Mild Steel	Aluminum, Stainless Steel, Mild Steel	Aluminum, Stainless Steel, Mild Steel	Aluminum, Stainless Steel, Mild Steel	Aluminum, Stainless Steel, Mild Steel
Typical Applications	HVAC, Home Shop, Plumbing, Auto Body Repair	Construction, Maintenance / Repair, Fabrication	Heavy Fabrication, Manufacturing	Heavy Fabrication, Manufacturing	Heavy Fabrication, Manufacturing

Ordering Information

1TORCH, a trademark of Thermal Dynamics Corporation, is registered with the U.S. Patent and Trademark Office, and is the subject of trademark registrations and pending applications in numerous other countries. For information on trademark registrations of Thermal Dynamics Corporation, contact the local trademark offices in the countries of interest.

	CUTMASTER™ 38 (1 Torch® SL60™ Hand Torch)			CUTMASTER™ 51 (1 Torch® SL60 Hand, SL100™ Machine)			CUTMASTER™ 81 (1 Torch® SL60 Hand, SL100™ Machine)			CUTMASTER™ 101 (1 Torch® SL100 Hand, SL100™ Machine)			CUTMASTER™ 151 (1 Torch® SL100 Hand, SL100™ Machine)		
Product Description	Catalog Number														
SYSTEMS															
	120-230V 1 ph	230V CE 1 ph	208-230V 1 ph	460V 1/3 ph	Other 3 ph	208-230V 1 ph	460V 1/3 ph	Other 3 ph	208-230V 1 ph	460V 1/3 ph	Other 3 ph	208-230V 1 ph	460V 1/3 ph	Other 3 ph	
75° Hand Torch, 20 ft. Leads	1-3820	1-4620	1-5120-1	1-5120-2	1-5120-V	1-1120-1	1-1120-2	1-1120-V	1-1320-1	1-1320-2	1-1320-V	1-1720-1	1-1720-2	1-1720-V	
75° Hand Torch, 50 ft. Leads	n/a	n/a	1-5121-1	1-5121-2	1-5121-V	1-1121-1	1-1121-2	1-1121-V	1-1321-1	1-1321-2	1-1321-V	1-1721-1	1-1721-2	1-1721-V	
180° Machine Torch, 25 ft. Leads*	n/a	n/a	1-5122-1*	1-5122-2*	1-5122-V*	1-1122-1*	1-1122-2*	1-1122-V*	1-1322-1*	1-1322-2*	1-1322-V*	1-1722-1*	1-1722-2*	1-1722-V*	
180° Machine Torch, 50 ft. leads*	n/a	n/a	1-5123-1*	1-5123-2*	1-5123-V*	1-1123-1*	1-1123-2*	1-1123-V*	1-1323-1*	1-1323-2*	1-1323-V*	1-1723-1*	1-1723-2*	1-1723-V*	
*Systems include machine torch with 1-3/8" (34.9mm) Diameter / 32 Pitch Rack Mounting Tube, Hand Pendant Control and Pinch Block. Pinion Assembly to be ordered as an accessory.															
NOTE: V = Voltage (3 = 3ph 400V, 4 = 3ph, 400V CE, 5 = 600V) – as applicable															
SPARE PARTS KITS															
Spare Parts Kits	5-3820 (Manual) 5-3821 (VIP Manual)		5-0050 (40A Manual) 5-0051 (VIP 40A Manual) 5-0052 (40A Machine)			5-0075 (60A Manual) 5-0076 (VIP 60A Manual) 5-0077 (60A Machine)			5-0110 (80A Manual) 5-0101 (VIP 80A Manual) 5-0120 (80A Machine)			5-0170 (100A Manual) 5-0172 (VIP 100A Manual) 5-0171 (100A Machine) 5-0173 (Gouging)			
ACCESSORIES (Apply to all CUTMASTER 1Series Systems accept as noted.)															
(1) Single Stage Air Filter Replacement Air Filter	7-7507 9-7741					(2) 			(3) 			(4) 			
(2) ATC™ Leads Extensions 15 ft. (4.6m) 25 ft. (7.6m) 50 ft. (15.2m)	7-7544 7-7545 7-7552														
(3) Leather Leads Cover 15 ft. (4.6m) 20 ft. (6.1m) 25 ft. (7.6m) 50 ft. (15.2m)	9-1258 9-1260 9-1270 9-1280														
(4) Straight Line Cutting Guide	7-8911														
(5) Cutting Guide Kit	7-8910														
(6) Cutting Guide (Basic)	7-7501														
(7) Multi-Purpose Cart	7-8888														
(8) Wheel Kit CM 51 Only CM 81/101/151 Only	9-8510 9-8331														
Pinion Assembly (not shown)	7-2827														
Automation Interface Kit CM 51/81/101/151 Only (not shown)	9-8310														
CNC Interface Cable 25ft. / 7.6m (not shown) 50ft. / 15.2m (not shown)	9-8312 9-8313														

**Genuine
Thermal Dynamics
Accessories**