

Parameters

Input voltage	110/230 VAC / 50/60 Hz
Input voltage tolerance	15 %
Effective cutting range	1525 x 3050 mm
Cutting process	plasma and oxy-fuel
Plasma cut - recommended mild steel thickness	up to 35 mm
Oxy-fuel cut - recommended mild steel thickness	up to 100 mm
Flash back protection	yes
Oxy-fuel torch included	yes
Plasma torch included	no
Plasma torch holder size	35 mm
Offline nesting software included	yes
THC control for plasma cutting by arc voltage	yes
Oxy-fuel THC control	manual
Type of gases	Propane
LCD screen	7"
Library of common shapes	50
Internal memory	4 GB
USB port for the drawings loading	yes
Torch lifter stroke	100 mm
Number of solenoid valves	3
Plasma torch collision protection	yes
Weight net/gross	134 kg / 207 kg
Type of plasma ignition	contact



Parameters

Cutting range	3-300 mm
Fuel gases	oxygen-acetylene, oxygen-propane, natural gas, mixed gases
Maximum cutting speed	750 mm/min. (10 mm)
Average cutting speed	520 mm/min. (30 mm)
Minimum cutting speed	120 mm/min. (300 mm)
Max. cutting oxygen pressure	8.5 bar
Min. preheating oxygen pressure	1.6 bar
Max. acetylene pressure	1.2 bar
Min. acetylene pressure	0.5 bar
Max. propane pressure	1.0 bar
Min. propane pressure	0.2 bar

Assembly

fittings
flashback arrestors
shut-off valves
torch
consumables
fixing nut

Dimensions

Gases inputs	cutting OXY: G1/4" preheating OXY: G3/8" fuel gas: G3/8" LH
Diameter of the torch body	32 mm
Length	250 mm



Specifications

Cutting current	10-30 A
Modes	cutting
Duty cycle @ 40° C	35 % @ 30 A; 100 % @ 21 A
Rated output voltage	92 VDC
Severance cutting capacity	10 mm +*
Piercing cutting capacity	8 mm*
Recommended cutting capacity	8 mm*
Plasma gas	compressed air
Air flow [lpm/bar]	48/4.5
Input voltage	220-240 VAC ± 15 %
Frequency	50/60 Hz
Dimension (L×H×W)	480×290×165 mm
Weight	10.5 kg
Certification depending on region	CE, C-TICK, CCC
Maximum input pressure [bar/psi]	10/145
Protection level	IP23S
Insulation class	H/F
Type of hand torch	FHT-EX®30H

*values for low alloy steel, e. g. MS S235JR

**Specifications**

Severance cutting capacity	10 mm +*
Piercing cutting capacity	8 mm*
Recommended cutting capacity	8 mm*
Plasma cutting	-10° C to +40° C
Transport and storage	-25° C to +55° C
Relative humidity	up to 90 % at 20° C
Application process	plasma cutting
Type of use	manual
Pilot current	10-18 A
Rated current and corresponding duty cycle	30 A / 100 %
Type of gas	compressed air
Gas flow rate	approx. 48 l/min
Min./max. operating pressure	3.5-5.0 bar
Operating pressure	dynamic 4.5 bar / static 6.0 bar
Type of voltage	DC direct voltage
Protection type of the power supply-side connections	IP3X (EN 60 529)
Type of connection	fixed
Voltage rating	500 V peak value
Rated value of control leads (trigger and cap sensor)	42 VAC / 0.1-1.0 A
Standard length	4 m
Structure of cable	(Bikox) compact cable
Weight	4 m / 1.2 kg



Specifications

Cutting current	10-30 A (120 VAC) / 10-40 A (230 VAC)
Modes	cutting / grid cutting
Duty cycle @ 40° C @ 230 VAC	40 % @ 40 A, 100 % @ 25 A
Rated output voltage	140 VDC
Severance cutting capacity	20 mm +*
Piercing cutting capacity	8 mm*
Recommended cutting capacity	12 mm*
Plasma gas	compressed air / nitrogen
Air flow [lpm/bar]	120/4.5
CNC interface	yes
Preadjusted voltage divider ratio	50:1
Input voltage	100/240 VAC ± 15 %
Frequency	50/60 Hz
Dimension (L×H×W)	469×228×177 mm
Weight	11.8 kg
Certification depending on region	CE, C-TICK, CCC
Maximum input pressure [bar/psi]	10/145
Protection level	IP23S
Insulation class	H/F
Type of hand torch	FHT-EX®40H
Type of standard machine torch	FHT-EX®40M

*values for low alloy steel, e. g. MS S235JR



Specifications

Severance cutting capacity	20 mm +*
Piercing capacity	8 mm*
Recommended cutting capacity	12 mm*
Plasma cutting	-10° C to +40° C
Transport and storage	-25° C to +55° C
Relative humidity	up to 90 % at 20° C
Application process	plasma cutting
Type of use	manual and mechanized
Pilot current	10-18 A
Rated current and corresponding duty cycle	40 A / 100 %
Type of gas	compressed air
Gas flow rate	approx. 120 l/min
Min./max. operating pressure	3.5-5.0 bar
Operating pressure	dynamic 4.5 bar/static 6.0 bar
Type of voltage	DC direct voltage
Protection type of the power supply-side connections	IP3X (EN 60 529)
Type of connection	TCS - 13 pin
Voltage rating	500 V peak value
Rated value of control leads (trigger and cap sensor)	42 VAC / 0.1-1 A
Standard length	4 m / 5 m / 7.5 m / 15 m
Structure of cable	(Bikox) compact cable
Weight	4 m / 1.2 kg 7.5 m / 1.8 kg 5 m / 1.4 kg 15 m / 3.2 kg

*values for low alloy steel, e. g. MS S235JR

**Specifications**

Cutting current	20-25 A @ 120 VAC / 20-45 A @ 230 VAC
Modes	cutting / grid cutting / gouging
Duty cycle @ 40° C @ 120 VAC	40 % @ 25 A, 100 % @ 16 A
Duty cycle @ 40° C @ 230 VAC	50 % @ 45 A, 100 % @ 32 A
Rated output voltage	145 VDC
Severance cutting capacity	25 mm +*
Piercing cutting capacity	10 mm*
Recommended cutting capacity	12 mm*
Plasma gas	compressed air / nitrogen
Air flow [lpm/bar]	90/4.5
CNC interface	yes
Preadjusted voltage divider ratio*	50:1
Input voltage	120/230 VAC ± 15 %
Frequency	50/60 Hz
Dimension (L×H×W)	469×228×177 mm
Weight	12.7 kg
Certification depending on region	CE / C-TICK / CCC
Maximum input pressure [bar/psi]	10/145
Protection level	IP23S
Insulation class	F
Type of hand torch	FHT-EX®45TTH
Type of machine torch	FHT-EX®45TTM

*values for low alloy steel, e. g. MS S235JR

Specifications

Cutting current	20-45 A
Modes	cutting / grid cutting / gouging
Duty cycle @ 40° C @ 120 VAC	80 % @ 45 A, 100 % @ 40 A
Rated output voltage	145 VDC
Severance cutting capacity	25 mm +*
Piercing cutting capacity	10 mm*
Recommended cutting capacity	12 mm*
Air flow [lpm/bar]	90/4.5
Plasma gas	compressed air / nitrogen
CNC interface	yes
Preadjusted voltage divider ratio*	50:1
Input voltage	3x400 VAC ± 15 % (CE)
Frequency	50/60 Hz
Dimension (LxHxW)	469x228x177 mm
Weight	12.7 kg
Certification depending on region	CE / C-TICK / CCC
Maximum input pressure [bar/psi]	10/145
Protection level	IP23S
Insulation class	F
Type of hand torch	FHT-EX®45TTH
Type of machine torch	FHT-EX®45TTM

*values for low alloy steel, e. g. MS S235JR



Specifications

Severance cutting capacity	25 mm +*
Piercing cutting capacity	10 mm*
Recommended cutting capacity	12 mm*
Plasma cutting	-10° C to +40° C
Transport and storage	-25° C to +55° C
Relative humidity	up to 90 % @ 20° C
Application process	plasma cutting / gouging
Type of use	manual and mechanized
Pilot current	20 A @ 45 A setting
Rated current and corresponding duty cycle	45 A / 100 %
Type of gas	compressed air / nitrogen
Gas flow rate	approx. 90 l/min
Max. inlet pressure	10 bar
Operating (dynamic) pressure	4.8 bar
Type of voltage	DC direct voltage
Protection type of the power supply-side connections	IP3X (EN 60 529)
Type of connection	TCS - 13 pins
Voltage rating	500 V peak value
Rated value of control leads (trigger and cap sensor)	42 VAC / 0.1-1.0 A
Standard length	5 m / 8 m / 15 m
Structure of cable	(Bikox) compact cable
Weight	5 m / 1.5 kg 8 m / 2.2 kg 15 m / 3.6 kg

*values for low alloy steel, e.g. MS S235JR



Specifications

Cutting current	30-55 A
Modes	cutting / grid cutting / gouging
Duty cycle @ 40° C @ 3×400 VAC	50 % @ 55 A, 100 % @ 41 A
Rated output voltage	170 V @ 3×400 VAC
Severance cutting capacity	30 mm +*
Piercing cutting capacity	20 mm*
Recommended cutting capacity	20 mm*
Plasma gas	compressed air / nitrogen
Air flow [lpm/bar]	100/5.2
CNC interface	optional
Preadjusted voltage divider ratio	50:1
Input voltage	3×400 VAC ± 15 %
Frequency	50/60 Hz
Dimension (L×H×W)	469×228×177 mm
Weight	11.8 kg
Certification depending on region	CE, C-TICK, CCC
Maximum input pressure [bar/psi]	10/145
Protection level	IP23S
Insulation class	H/F
Type of hand torch	FHT-EX®105RTXH
Type of machine torch	FHT-EX®105RTXM

*values for low alloy steel, e.g. MS S235JR



Specifications

Cutting current	30-75 A
Modes	cutting / gouging / grid cutting
Duty cycle @ 40° C	100 % @ 75 A
Rated output voltage	170 V (extra-boost 220 V)
Severance cutting capacity	35 mm +*
Piercing cutting capacity	20 mm*
Recommended cutting capacity	25 mm*
Plasma gas	compressed air / nitrogen
Air flow [lpm/bar]	110/5.2
CNC interface	optional
Preadjusted voltage divider ratio	50:1
Input voltage	3×400 VAC ± 15 %
Frequency	50/60 Hz
Dimension (L×H×W)	560x400x265 mm
Weight	24 kg
Certification depending on region	CE, C-TICK, CCC
Maximum input pressure [bar/psi]	10/145
Protection level	IP23S
Insulation class	H/F
Type of hand torch	FHT-EX®105RTXH
Type of machine torch	FHT-EX®105RTXM

*values for low alloy steel, e.g. MS S235JR

**Specifications**

Cutting current	30-100 A
Modes	cutting / gouging / grid cutting
Duty cycle @ 40° C	50 % @ 100 A, 100 % @ 80 A
Rated output voltage	170 V (extra-boost 220 V)
Severance cutting capacity	50 mm +*
Piercing cutting capacity	20 mm*
Recommended cutting capacity	35 mm*
Plasma gas	compressed air / nitrogen
Air flow [lpm/bar]	135/5.2
CNC interface	optional
Preadjusted voltage divider ratio	50:1
Input voltage	3x400 VAC ± 15 %
Frequency	50/60 Hz
Dimension (L×H×W)	560×400×265 mm
Weight	24 kg
Certification depending on region	CE, C-TICK, CCC
Maximum input pressure [bar/psi]	10/145
Protection level	IP23S
Insulation class	H/F
Type of hand torch	FHT-EX®105RTXH
Type of machine torch	FHT-EX®105RTXM

*values for low alloy steel, e.g. MS S235JR

FHT-EX[®] 105RTXH/M FACT SHEET

PLASMA CUTTING TORCH BY THERMACUT[®]



Specifications	page 1
Severance cutting capacity	50 mm +*
Piercing cutting capacity	20 mm*
Recommended cutting capacity	35 mm*
Plasma cutting	-10° C to +40° C
Transport and storage	- 25° C to +55° C
Relative humidity	up to 90 % at 20° C
Application process	plasma cutting, gouging, marking
Type of use	manual and mechanized
Rated current and corresponding duty cycle	105 A / 100 %
Type of gas	compressed air / nitrogen
Gas flow rate	105 A / 100 A approx. 135 l/min
	85 A / 75 A approx. 110 l/min
	65 A / 55 A approx. 98 l/min
	45 A approx. 87 l/min
Gas flow rate - gouging	approx. 230 l/min
Max. inlet pressure	10 bar
Operating (dynamic) pressure	5.2 bar
Type of voltage	DC direct voltage
Protection type of the power supply-side connections	IP3X (EN 60 529)
Type of connection	TCS - 13 pin
Standard length	8 m / 15 m
Structure of cable	(Bikox) compact cable

*values for low alloy steel, e.g. MS S235JR

FHT-EX® 105RTXH/M FACT SHEET

PLASMA CUTTING TORCH BY THERMACUT®



Specifications

page 2

Type of gas	Air	Nitrogen
Gas quality specification	Recommended air quality ISO 8573-1 Class 1.2.2 Air max. particle size: 0.1 microns, class 1 ref. to ISO 8573 Air max. oil: 0.1 mg / m ³ , class 2 ref.: ISO 8573 Air max. dewpoint: +3° C, class 4 ref. to ISO 8573	Purity ≥ 99.99 %
Gas quality	clean, moisture-free, without oil	
Weight FHT-EX®105RTXH Hand torch	8 m / 3.3 kg 15 m / 5.6 kg	
Weight FHT-EX®105RTXM Machine torch	8 m / 3.4 kg 15 m / 5.9 kg	

1-phase



PLASMA CUTTING SYSTEM BY THERMACUT®

Specifications

Cutting current	10-25 A @ 120 VAC / 10-45 A @ 230 VAC
Modes	cutting / grid cutting / gouging / marking
Duty cycle @ 40° C @ 120 VAC	40 % @ 25 A, 100 % @ 16 A
Duty cycle @ 40° C @ 230 VAC	50 % @ 45 A, 100 % @ 32 A
Rated output voltage	145 VDC
Severance cutting capacity	25 mm +*
Piercing cutting capacity	10 mm*
Recommended cutting capacity	12 mm*
Plasma gas	compr. air / nitrogen / argon (marking)
Air flow [lpm/bar]	90/4.5
CNC interface / CAN BUS interface	optional / optional
Preadjusted voltage divider ratio**	50:1
Input voltage	120/230 VAC ± 15 %
Frequency	50/60 Hz
Dimension (L×H×W)	469×228×177 mm
Weight	12.7 kg
Certification depending on region	CE / C-TICK / CCC
Maximum input pressure [bar/psi]	10/145
Protection level	IP23S
Insulation class	F
Type of hand torch	FHT-EX®45TTH
Type of machine torch	FHT-EX®45TTM

*values for low alloy steel, e. g. MS S235JR

**when equipped with CNC interface



Specifications

Cutting current	10-45 A
Modes	cutting / grid cutting / gouging / marking
Duty cycle @ 40° C @ 120 VAC	80 % @ 45 A, 100 % @ 40 A
Rated output voltage	145 VDC
Severance cutting capacity	25 mm +*
Piercing cutting capacity	10 mm*
Recommended cutting capacity	12 mm*
Air flow [lpm/bar]	90/4.5
Plasma gas	compr. air / nitrogen / argon (marking)
CNC interface / CAN BUS interface	optional / optional
Preadjusted voltage divider ratio**	50:1
Input voltage	3x400 VAC ± 15 % (CE)
Frequency	50/60 Hz
Dimension (LxHxW)	469x228x177 mm
Weight	12.7 kg
Certification depending on region	CE / C-TICK / CCC
Maximum input pressure [bar/psi]	10/145
Protection level	IP23S
Insulation class	F
Type of hand torch	FHT-EX®45TTH
Type of machine torch	FHT-EX®45TTM

*values for low alloy steel, e. g. MS S235JR

**when equipped with CNC interface



Specifications

Severance cutting capacity	25 mm +*
Piercing cutting capacity	10 mm*
Recommended cutting capacity	12 mm*
Plasma cutting	-10° C to +40° C
Transport and storage	-25° C to +55° C
Relative humidity	up to 90 % @ 20° C
Application process	plasma cutting / gouging / marking
Type of use	manual and mechanized
Pilot current	20 A @ 45 A setting
Rated current and corresponding duty cycle	45 A / 100 %
Type of gas	compr. air / nitrogen / argon
Gas flow rate	approx. 90 l/min
Max. inlet pressure	10 bar
Operating (dynamic) pressure	4.8 bar
Type of voltage	DC direct voltage
Protection type of the power supply-side connections	IP3X (EN 60 529)
Type of connection	TCS - 13 pins
Voltage rating	500 V peak value
Rated value of control leads (trigger and cap sensor)	42 VAC / 0.1-1.0 A
Standard length	5 m / 8 m / 15 m
Structure of cable	(Bikox) compact cable
Weight	5 m / 1.5 kg 8 m / 2.2 kg 15 m / 3.6 kg

*values for low alloy steel, e. g. MS S235JR

CUTTING TABLE

SUITABLE FOR EX-TRACK® DEMO
BY THERMACUT®

FACT SHEET



Specifications

Part number	EX-0-716-001
Dimensions (h x w x l)	870 x 1360 x 1200 mm
Max. load capacity for cut material	400 kg
Total load capacity of the table (static)	800 kg
Total load capacity of the table (dynamic)	400 kg
Table weight (without water and CNC unit)	108 kg
Usable work surface for machine cutting	600 x 600 mm
Working height w/o wheels	705 mm
Working height with wheels	860 mm
Grid weight	15 kg
Water tank (waterbed) volume*	150 l

*The minimum water level from the bottom of the tank should be at least 5 cm to prevent damage to the tank from molten metal.