Production Range 2025

synmatic 250 / 300

MIG/MAG Inverter with Synergy

- ✓ Very simple operation: three rotary knobs are all you need. No menu, no display.
- Nevertheless, all necessary comfort functions such as inching and manual adjustment are available.
- ✓ Infinitely variable single knob operation: Set the wire diameter, then simply select the material thickness using the rotary knob and start welding.
- ✓ MIG/MAG synergy programmes for steel wires from 0.6 mm to 1.2 mm. This covers everything from thin sheet metals to thicker plates.
- Design with ventilation duct & stand-by circuit for ventilation: Long service life due to minimised internal dust build-up.

Also: Quieter operation & saves energy.

✓ Powerful 4-roll wire drive with 37mm rollers: Feeds even soft

wires optimally, particularly advantageous with longer torches.

HIGHeff85+

- ✓ erfi HIGHeff85+ primary inverter with high efficiency (2019/1784EU) - less mains power requirement with the same welding performance.
- ✓ Gasless and currentless wire inching.
- ✓ Design AND production in Germany. Genuine 'Made in Germany' with a 3-year guarantee.

3 Years Warranty

√ 5 metre mains cable with plug: Indispensable for everyday use! Saves an extension cable in many cases!

Synmatic stands for:

- ☑ Intuitive operation
- ✓ No menus
- ✓ Instant welding





ahead.

SYNERGIE Programs

for Steel
4-Roll

4-Roll
wire drive

85+
High Efficiency

5m Mains cable with 16A CEE-Plug

300A 3x400V

DPi Inverter

Made in Germany

One step

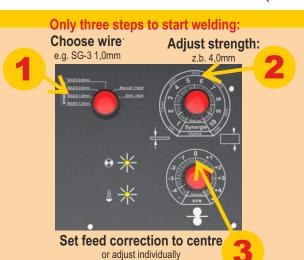
Accessories	#
synmatic 250, 250A/35%, 3x400V	53-11-00
Torch SB250G/3m	20-04
Regulator	38-02-BC
Earth lead 25 qmm/3m	38-09

Accessories	#
synmatic 300, 300A/25%, 3x400V	53-21-00
Torch SB250G/3m	20-04
Regulator	38-02-BC
Earth lead 25 qmm/3m	38-09



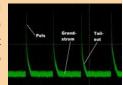
synmatic	250	300
Mains	3x400V	3x400V
Fuses (slow)	16A	16A
Current range	25-250A	25-300A
Efficiency	85%	85%
Open Circ. Voltage	75V	75V
D.C. 25% (20°/40°)	-	300/270A
D.C. 35% (20°/40°)	250/220A	
D.C. 60% (20°/40°)	170/140A	180A/150A
D.C. 100% (20°/40°)	130/110A	140/120A
Wire diameters	0,6-1,2*	0,6-1,2*
Wire feeder	4-roll	4-roll
Weight	ca. 45kg	ca. 45kg
Dimensions LxWxH	760x470 x770 mm(H)	
Built according to	EN60974-1,-5, -10 Cl. A.	
Protection	IP21	IP21

*Wire drive rolls 0,8/1,0mm initially enclosed



ecomatic 265PULS

- ✓ MIG/MAG Pulse Welding: virtually spatter free welding
- due to electronic controlled metal transfer (ODPP: one droplet per pulse). Perfect welding results with almost no rework needed.



- ✓ In direct comparison: the low spatter arc (above) of standard welding program in direct contrast to the virtually spatter free arc in pulse mode (below). Same workpiece, welding was done with 1,0mm INOX wire. Therefore MIG/MAG-Puls is the ideal technology for sensitive surfaces and seams in visible areas.
 - Standard
- ✓ Multipulse: a second pulse generator is added to control heat input by separating heating and cooling phases. Results in seams that look like welded by TIG -especially for aluminium and INOX.
- ✓ Integrated Database: all synergic welding and pulsing parameters for mild steel, aluminium, INOX and MIGbrazing are stored in the machines internal memory. So set-up for welding is as easy as dialling in the thickness of the material!
- ✓ Stepless DPi-Inverter: no voltage steps and confusing coarse and fine settings. Just use one single knob or even the remote on your torch to set the desired material thickness!
- ✓ Remote Control socket for welding energy control. Torches with built-in remote control (optional) are ideal to change current-also during welding.
- ✓ erfi Hot-Arc: avoids cold joints when starting the arc. Outstanding for aluminium.
- erfi DDc Arc dynamic control adjusts "hard" and "soft" arc characteristics. Arc dynamics are automatically adjusted for perfect arc start.
- √ 4-Roll wire feeder fully geared with powerful motor. Wire speed digitally stabilised.
- ✓ 2T / 4T (latching), 4T with slope control. Inching mode to insert wire without gas & voltage.
- ✓ Clear and obvious user Interface: four buttons for

directly addressing important functions. One rotary control for welding current/material thickness, the other for arc length adjustment. Welding professionals are given the opportunity for fine adjustments in the menus.



The TOP model in the ecomatic series:

DPi

Inverter

MP

MultiPULS

4-Roll

wire drive

RC

Remote Control

DdC

Dynamic Inductor Control

85+

HighEfficiency

- ☑ Practically spatter-free pulse welding
- ☑ Multipulse function for seams with a TIG look
- ☑ With remote control on the torch (optional)



ecomatic 265 PULS	
Accessories	#
ecomatic 265PULS	53-30-00
Torch SB240G/4m/Up Down	20-51-U
Regulator	38-02-BC
Earth lead 25 gmm/3m	38-09







4-Roll Drive

evo 250 und 300 are fitted with a superior 4-roll wire drive using large 37mm rolls and a powerful 50W DC motor.

Туре	265Puls
Mains	3x400V
Fuses (slow)	16A
Current range	25-250A
Efficiency	85%
Open Circ. Voltage	75V
D.C. 35% (25/40°)	250/220A
D.C. 40% (25/40°)	
D.C. 60% (25/40°)	170/140A
D.C. 100% (25/40°)	130/110A
Wire feeder	4-Rollen
Wire diameters	0,6-1,0
Protection	IP21
Dimensions LxWxH	750x470x760
Weight	45kg

ecomatic 250 / 300

- ✓ Digital ammeter and voltmeter: The data of the last weld can be displayed. Important for WPS according to EN1090.
- ✓ Stepless single knob control: No complicated settings. Simply select the material thickness and weld.
- ✓ The MIG/MAG synergy programmes for steel, stainless steel and aluminium have been developed by welding experts.
- ✓ Additional programmes for MIG brazing included (e.g. for car bodies).
- ✓ Powerful 4-roll wire drive with 37 mm rollers: Feeds soft wires optimally, particularly advantageous with longer torches.



- √ Fine, digitally controlled MIG/MAG arc with finely adjustable inductor effect 'hard' and 'soft'
- ✓ Hot start function, e.g. for aluminium.
- ✓ 2-stroke / 4-stroke selectable. Extended 4stroke function with hot start and slope
- ✓ Gasless inching
- ✓ Gas test function
- √ 5 metre mains cable with plug: Indispensable for daily use! Saves an extension cable in many cases!

HIGHeff85+

✓ erfi HIGHeff85+ primary inverter with very high efficiency (fulfils 2019/1784EU), thus less mains power requirement with the same welding performance.

3 Years Warranty

- ✓ Design AND production in Germany. Genuine 'Made in Germany' with a 3-year guarantee.
- Design with ventilation duct & stand-by circuit for ventilation: Long service life thanks to minimised internal dust deposits. As well: Quieter operation & saves energy.



Accessories	#
ecomatic 300, 300A/25%, 3x400V	53-20-00
Torch SB250G/3m	20-04
Regulator	38-02-BC
Earth lead 25 qmm/3m	38-09

300A 3x400V



ecomatic	250-4	300-4	
Mains	3x400V	3x400V	
Fuses (slow)	16A	16A	
Current range	25-250A	25-300A	
Efficiency	85%	85%	
Open Circ. Voltage	75V	75V	
D.C. 25% (20°/40°)		300/270A	
D.C. 35% (20°/40°)	250/220A		
D.C.60% (20°/40°)	170/140A	180A/150A	
D.C. 100% (20°/40°)	130/110A	140/120A	
Wire diameters	0,6-1,0*	0,6-1,0*	
Wire feeder	4-Rollen	4-Rollen	
Weight	ca. 45kg	ca. 45kg	
Dimensions LxWxH	760x470 x770 mm(H)		
Built according to	EN60974-1,-5, -10 Cl. A.		
Protection	IP21	IP21	

*Wire drive rolls 0,8/1,0mm initially enclosed

ecomatic stands for:

- ☑ Digital precision
- ☑ Steel, aluminium, stainless steel, MIG-brazing
- ☑ Versatile functions

Accessories	#
ecomatic 250, 250A/25%, 3x400V	53-10-00
Torch SB250G/3m	20-04
Regulator	38-02-BC
Earth lead 25 gmm/3m	38-09

LC-Display
Large Graphic
LC-Display

SYNERGY Control: Steel, Alu, Braz

4-Roll wire drive

DdC











Select material programme: select the inserted wire from a list of wire materials (steel, aluminium, stainless steel, CuSi3) and diameters (0.8 mm, 1.0 mm, etc.).



Setting the material thickness: Use the right-hand dial to adjust the desired material thickness. Or preselect the

welding current. Use the lefthand dial to correct the arc length if necessary..



neomatic 350 / 350W / 400W

Germany

Advantages neomatic:

- ✓ erfi HIGHeff85+ primary inverter for the MIG/MAG process with very high efficiency (fulfils 1784/2019/EU).
- ✓ Selectable display of welding current, welding voltage or feed speed. Values can also be called up after the welding process e.g. for checking with WPS in accordance with EN1090.
- ✓ 2-stroke and 4-stroke modes with extended current slope control
- ✓ Integrated database: Parameter fields and welding synergic curves are stored for all important materials and wire diameters: Mild steel, stainless steel (CrNi) and aluminium (ALMg).
- Preselect material thickness and weld: The material thickness can be set directly.
- ✓ Adjustable erfi-Hotarc avoids binding errors at the

start of welding. Indispensable for aluminium!

✓ 4-roll wire drive with a powerful DC motor and fully geared version. Speed electronically stabilised, automatic creep-in.



✓ Clearly arranged control panel: The four direct buttons allow quick access to all functions. Set the material thickness on the right rotary knob, adjust

the arc length on the left if necessary done! Welding professionals can also make a wide range of fine adjustments in the menu.



neomatic	350-4	350W-4	400W-4
Mains	3x400V	3x400V	3x400V
Fuses (slow)	16A	16A	25A
Current range	25-350A	25-350A	25-400A
Efficiency	86%	86%	86%
Open Circ. Voltage	75V	75V	75V
D.C. 35% (25°/40°)	350A/320A	350A/320A	400/370A
D.C. 60% (25°/40°)	280A/250A	280A/250A	330A/300A
D.C. 100% (25°/40°)	230A/200A	230A/200A	280A/250A
Wire feeder	4-roll, geared	d 4-roll, geared	4-roll, geared
Wire diameters	0,8mm-1,2m	m 0,8mm-1,2mm	0,8mm-1,2mm
2T/4T/Inching	yes	yes	yes
Synergy programs	yes	yes	yes
Water Cooling	-	on board	on board
Water tank	-	8 liters	8 liters
Built according to:	EN60974-1,-5, -10 Cl. A.		
Protection	IP21	IP21	IP21
Dimensions LxWxH	930 x 400 x 860		
Weight	ca. 63kg	ca. 70kg	ca. 73kg

SYNERGY Control

4-Roll wire drive

5m Mains cable with 16A CEE-Plug

350A 3x400V



85+
High Efficiency



neomatic 350-4	
Accessories	#
neomatic 350-4, gas cooled.	53-60-00
Forch SB360G/4m	20-08
Regulator	38-02-BC
Earth lead 35 qmm/3m	38-10

neomatic 350W-4

Accessories	#
neomatic 350W-4, water cooled	53-61-00
Torch SB400W/4m	20-14
Regulator	38-02-BC
Earth lead 50 qmm/3m	38-11

 neomatic 400W-4

 Accessories
 #

 neomatic 400W-4, wassergek.
 53-62-00

 Torch SB400W/4m
 20-14

 Regulator
 38-02-BC

 Earth lead 50 qmm/3m
 38-11



neomatic 400W-VK	
Accessories	#
neomatic 400W-VK + VK450W wassergek.	53-63-00
Interconnection cable 50qmm, 5m length	31-15
Torch SB400W/4m	20-14
Regulator	38-02-BC
Earth lead 50 qmm/3m	38-11

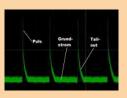
NEW

HIGHeff85+

neomatic 330W-PULS / 400W-PULS

One step

✓ MIG/MAG pulse process: The controlled droplet transfer allows practically spatter-free material transfer from the welding wire to the workpiece. Therefore: Almost no rework and a perfect seam appearance.



✓ MULTIPULSE: A second, superimposed pulse frequency can be applied for seams in visible areas in "TIG-

✓ In comparison: The top image shows the low-spatter arc in standard MIG/MAG operation (here: stainless steel, 1.0 mm wire), while the bottom image shows the practically spatterfree arc with pulse technology for the same welding task.ldeal for sensitive surfaces and visible seams.



- ✓ Integrated database: Parameter fields and synergic curves are stored for all important materials and wire diameters: Mild steel, stainless steel (CrNi) and aluminium (ALMg) standard and pulsed processes respectively.
- ✓ Preselect material thickness and weld: The material thickness can be called up directly by remote control via the torch (optional).
- ✓ Remote control connection: Set material thickness directly on the torch using up/down pushbuttons (op-
- ✓ 4-roll wire drive with powerful DC motor. Wire speed is electronically stabilised, automatic creep-in.
- ✓ 2-stroke and 4-stroke modes with extended current slope control, adjustable erfi hot start
- ✓ Processes: MIG/MAG, MIG pulse, MIG-Multipulse
- ✓ erfi HIGHeff85+ primary inverter with very high efficiency (fulfils 2019/1784EU), therefore less mains power requirement with the same welding output.

Туре	330WPuls	400WPuls	400WP-VK
Mains	3x400V	3x400V	3x400V
Fuses (slow)	16A	25A	25A
Current range	25-330A	25-400A	25-400A
Efficiency	86%	86%	86%
Open Circ. Voltage	75V	75V	75V
D.C. 35% (25/40°))	400/370A	400/370A
D.C. 40% (25/40°)	330/300A		
D.C. 60% (25/40°)	280/250A	330/300A	330/300A
D.C. 100% (25/40°) 230A/200A	280/260A	280/260A
Wire feeder	4-ro	ll, geared	
Wre diameters	0,8-1,2	0,8-1,2	0,8-1,2
Water cooling	on board	on board	on board
Wasser tank	8 Liters	8 Liters	8 Liters
Protection	IP21	IP21	IP21
Dimensions LxWxH	1	930x40 <mark>0x860</mark>	
Weight	70kg	73kg	





High Efficiency



#
53-70-00
20-14-U
38-02-BC
38-11







4-Roll Wire Drive with aluminium cast chassis using a powerful 70W-DC motor in fully geared version.

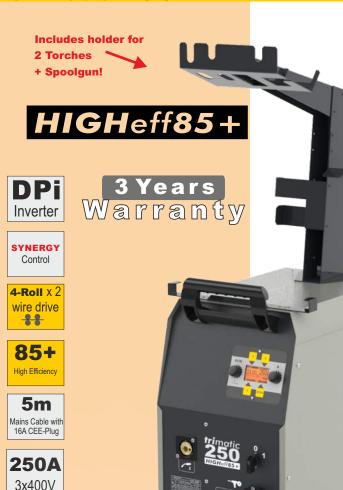
Up/Down Current Control on the torch Including a 4m torch!

neomatic 400W-Puls-VK		
Accessories	#	
neomatic 400W-Puls-VK + VK450W water c.	53-73-00	
Interconnection cable 50qmm, 5m length	31-15	
Torch SB400W/4m/UpD	20-14-U	
Regulator	38-02-BC	
Earth lead 50 qmm/3m	38-11	



trimatic 250





TRIMATIC is the perfect choice for car body workshops that demand a high flexibility solution for all welding purposes. Due to its synergic control and automatic torch switching capability the TRIMATIC 250 sets are intuitive to use and allow precise current control.

- Two integrated 4-roll wire feed units for two independent torches
- Plus an extra terminal to connect the spool gun for soft aluminium wires
- Synergic programs for steel 0,6-1,0mm, aluminium 0,8-1,0mm, MIG-brazing 0,8-1,0mm and INOX 0,8-1,0mm as well. Plus manual control program.
- ✓ Big LC-Display: welding current, welding voltage and wire feed. Saves values after welding
- ✓ 2-stroke or 4-stroke operation with active current monitoring. Gasless wire inching, gas test function.
- ✓ Precise stepless current adjustment
- ✓ Wire soft start ("creep in"): controlled arc start with slower wire speed, adjustable
- ✓ Space for 2 big wire spools in standard D300 size. (smaller D200 using adaptor)
- Space for 2 gas cylinders each 20 litres: for both Argon and mixed gas supply
- Complete set of cable- and torch holders for 2 normal torches and spoolgun included.
- ✓ Easily moveable on big castors
- Massive and sturdy handle, comfortable height of operation panel
- √ 2 gas hoses including gas distributor
- √ 5m mains cable+CEE16 plug

	trimatic 250	
	Accessories	#
	trimatic 250	53-90-00
	2x Torch SB150G/3m	2x 20-01
	2x Regulator	2x 38-02-BC
	Earth lead 25 qmm/3m	38-09



Spoolgun MBH25D

Ideal for welding thin aluminium panels. Due to the short wire feed path, to weld even 0.8 mm aluminium wire! Ideal for car body panels!

Available accessories:



Made in Germany

Mains 3x400V Fuses (slow) 16A 25-250A Current range Efficiency 85% Open Circ. Voltage 75V D.C. 35% (25°/40°) 250A/220A D.C. 60% (25°/40°) 170A/140A D.C. 100% (25°/40°) 130A/110A 2 x 4-roll Wire feeders Wire diameters 0,6-1,0* 2T/4T/Inching yes/yes/yes Synergy programs yes Built according to: EN60974-1,-5 -10Cl. A. Protection IP21 Dimensions LxWxH 758 x 466 x 770**

Techn. Spec.

Weight

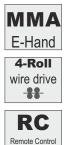
Trimatic 250

*Wire drive rolls 0,8/1,0mm initially enclosed ,** dimensions w/o torch holder

55kg

Micro X17 MAGmobil

Made in Germany



170A 230V



Portable & flexible inverter system for MIG/MAG and MMA processes.

- ✓ erfi X-Inverter technology: Passive PFC, therefore less mains power requirement with the same welding performance.
- ✓ Design with ventilation duct & stand-by circuit for ventilation: Long service life thanks to minimised internal dust deposits. Also: Quieter operation & saves energy.
- ✓ Space for large D300 spools: Use the system in the workshop with standard '15kg' spools. Alternatively, D200 ('5kg') also possible for mobile use.
- ✓ Infinitely variable single knob operation: Forget about complicated settings. Simply select the material thickness and start welding. This not only works with steel, but also with stainless steel, aluminium AIMg4.5 and ALSi5, MIG brazing and even with gasless cored wire (FCW) thanks to the synergy programs.
- ✓ Powerful 4-roll wire drive with 37 mm rollers: Also feeds soft wires optimally, particularly advantageous with longer torches.
- ✓ MMA welding: Excellent welding properties even for stick electrodes thanks to adjustable hot start and arc dynamics.
- √ Fine, digitally controlled MIG/MAG arc with finely adjustable throttle effect 'hard' and 'soft', a hot start e.g. for aluminium.
- ✓2-stroke / 4-stroke selectable, gas- and currentless threading Digital ammeter, remote control on the torch possible*
- √ 5 metre mains cable with plug: Indispensable for daily use! Saves an extension cable in many cases!

*Only in conjunction with optional SB240-Torch



Powerful wire drive: superior 4-roller drive with 50 W motor 37 mm feed rollers with large contact surface.



Large D300 coils: Space for normal D300 coils. D200 using adapter.

Accessories	#
Micro X17 170A/35%, 230V	75-03-01
Torch SB150G/3m	20-01
Regulator	38-02-BC
Earth lead 16 gmm/3m	38-072

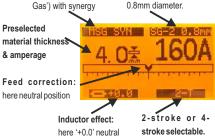


Sustainable construction: Made in Germany

The MicroX17MAGmobil, including the complete power unit, is manufactured exclusively in Germany. The electronic design with lightning-fast digital DSP control comes from the hands of erfi head Dipl.-Ing. Peter Finzel. This means: Expertise and spare parts are guaranteed. A sustainable product is only created through service. What's more, the device is made almost entirely from highly recyclable metal, with as little plastic as possible.

Optimally organised set-up: everything at a glance.

Operating mode: Inserted wire: Operating 'MSG' ('Metall Shielding mode: here e.g. SG-2, Gas') with synergy



Available accessories:







MIG/MAG up to 170A

up to 150A

455

Micro X17 MAGmobil		
Mains		230V
Fuses (slow)		16A
Current range MIG/MAG		25-170A
Current range MMA		20-150A
Open Circ. Voltage		90V
Current adjustment		stepless
Drosseleinstellung		stepless
D.C. 35% (25/40°)		170/150A
D.C. 100% (25/40°)		120/100A
Wire feeder		4-roll
Wire diameter		0,6-1,0
Amp-meter		•
Hot Arc and Slope		•
2T/4T		•
Protection		IP23S
Dimensions LxWxH		565 x 295 x
Weight		20,5kg

MicroX18HF

MicroX16

One step ahead.

DC-TIG-Inverter up to 180A with HF-Arc Start

MMA Inverter up to 150A (3,25mm)

150A





Accessories	#
Micro X18 180A/35%, 230V	72-02-01
TIG-Torch RL17/4m/U	75-02-02
Regulator	38-02-BC
Earth lead 16 qmm/3m	38-072



Accessories	#
Micro X16 150A/35%, 230V	72-01-01
Electrode cable	38-074
Earth lead 16 qmm/3m	38-072

Welding system for TIG DC and MMA based on the latest fully digital primary inverter technology.

√ Very large comfort LCD: All parameters are in view thanks to the big graphic display. Easy to operate with two shortcut keys and rotary encoder. Precise ampere setting.



- ✓ HF high-frequency ignition: Starts the arc without touching the workpiece - no tungsten inclusions.
- ✓ Comprehensive pulse function: The fast pulse function with frequency control up to 1250Hz allows effective concentration

of the arc and reduces heat input. The time pulse allows the precise setting of a slow pulse sequence for synchronised droplet transfer.



- ✓ **Job memory**: 7 frequently used welding types and settings can be saved and recalled at the touch of a button.
- ✓ Remote control on the torch: The welding current can be called up directly on the torch using two buttons (up/down). Included as standard!
- ✓ Extended 4-cycle with slope control: Previously set second



Premium MMA welding inverter for stick electrodes up to 3.25mm (150A/26V) in a sturdy all-metal cabinet.

- ✓ Digital display for welding current and messages. Completely digital real-time control.
- ✓ Hotstart: briefly increased current for optimum ignition.
- ✓ Automatic arc dynamics ideal for difficult electrodes. Current increases at the short-circuit moment.
- ✓ Antisticking prevents the electrodes from sticking to workpiece.
- ✓ All the advantages of the X series: XRi, passive PFC, stand-by

current can be called up at the touch of a button on the torch.

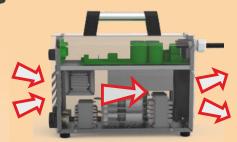
- ✓ Spot welding function: Creates even tacking spots with precisely preset welding time.
- ✓ Current curves can be set on the LC display with graphi
 - cal support. This allows perfect sequences to be created and saved for every application.



- ✓ Electrodes up to 3.25mm (150A/26V)
- √ 5 metre mains cable 3-year guarantee!

Advantages of Micro X:

√ Robust sheet steel chassis with separate ventilation duct. The electronics are housed in a dust-protected room to minimise soiling.



- ✓ Stand-by circuit: Dust protection, energy saving; quiet working environment thanks to demand-controlled fan. XRi
- ✓ Passive PFC to minimise current peaks, improved power factor, reduced power consumption.



- ✓ XRi: Uninterrupted operation on long mains cables.
- √5 metre mains cable 3 year guarantee!





Sustainable construction: Made in Germany

The MicroX16 and X18HF, including the complete power unit, are manufactured exclusively in Germany. The electronic design with lightning-fast digital DSP control comes

from the hands of erfi head Dipl.-Ing. Peter Finzel. This means: Expertise and spare parts are guaranteed. A sustainable product is only created through service. What's more, the device is made almost entirely from highly recyclable metal, with as little plastic as possible.

Technical Spec.	MicroX16	MicroX18HF
Mains	230V	230V
Fuses (slow)	16A	16A
Current range	10-150A	8-180A
•		
Open Circuit Voltage	92V	92V
D.C. 35%(25°C)	150A/26,0V	180A/17,2V
D.C. 30%(40°C)	150A/26,0V	180A/17,2V
D.C. 100% (25°C)	100A/24,0V	110A/14,4V
D.C. 100% (40°C)	90A/23,6V	100A/14,0V
Mains cable	5 Meters	5 Meters
Digital display	LED	LCD
Remote	-	Up/Down
Fan cooling + Stand-By	••	
Hotstart/Arc force/Antistick	●/●/●	●/●/●
HF-start/pulse/spot	-/-/-	●/●/●
Passive PFC	•	•
Protection	IP21	IP23
Weight	9,5kg*	13,5kg*
Dimensions LxWxH	365x149x283n	nm

*w/o mains cablel, including mains 10,5kg bzw. 14,5kg

Made in Germany