Master M 355 G

MSM355G

Compact MIG/MAG welder with manual, synergic (Auto), pulse (Auto Pulse), and double pulse welding options. Provides 350 A with a 40% duty cycle. Intelligent welding parameter setting with Weld Assist. Color LCD display and LED work lights for excellent user experience. Includes WiseFusion and work pack welding software programs inc. Fe, Ss, Al, CuSi, CuAl, Fe Metal, Fe Rutil, FC-CrNiMo materials. Suitable for generator use.

Technical data

Description	Value
Mains connection voltage	380...460 V ±10 %
Mains connection phases	3~50/60 Hz
Mains connection cable type	H07RN-F
Mains connection cable size	4 mm²
Maximum supply current [I1max]	17.1 A...21.3 A
Effective supply current [I1eff]	10.8 A...13.5 A
Rated maximum input power [S1max]	14 kVA
Mains fuse	16 A
Idle state power consumption [P1idle]	18 W

Description	Value
No-load state power consumption (MMA), power save	18 W
No-load state power consumption (MMA), fans ON	119 W
No-load voltage [U0]	55 V...69 V
Open circuit voltage [Uav]	53 V...64 V
Output, duty cycle % at rated max. current, MIG	40 %
Output at +40 °C, rated max current, MIG	350 A
Output at +40 °C, 60% MIG	280 A
Output at +40 °C, 100% MIG	220 A
Output range, MIG	15 A / 10 V ... 350 A / 45 V
Output range, TIG	15 A / 1 V ... 350 A / 45 V
Output range, MMA	15 A / 10 V ... 330 A / 45 V
Voltage adjustment range, MIG	10 V...40 V
VRD voltage	24 V
Power factor at rated maximum current [λ]	0.91
Efficiency at rated maximum current [η]	87 %
EMC class	A
Minimum short-circuit power of supply network [Ssc]	2.4 MVA
Voltage supply for auxiliary devices	12 V
Voltage supply for cooling unit	24 V, 380...460 V
Welding connection type	Euro
Wire feed mechanism	4-roll, Single-motor
Diameter of feed rolls	32 mm
Filler wire diameter, Fe	0.8 mm...1.2 mm
Filler wire diameter, Ss	0.8 mm...1.2 mm
Filler wire diameter, MC/FC	0.8 mm...1.2 mm
Filler wire diameter, Al	0.8 mm...1.2 mm
Wire feed speed	0.5 m/min...25 m/min
Maximum wire spool weight	20 kg
Maximum wire spool diameter	300 mm

Description	Value
Maximum shielding gas pressure	0.5 MPa
Control panel, model	Custom LCD
Control panel, display	Color LCD
Control panel, controls	2 control knobs, Push buttons
Control panel, type of installation	Built-in
Control panel, input voltage (DC)	12 V
Wired communication type	CAN bus
Operating temperature	-20 °C...40 °C
Storage temperature	-40 °C...60 °C
Recommended minimum generator power [Sgen]	20 kVA
LED battery type and voltage	SAMSUNG SDI (INR18650-26J; 3,6 V; 2600 mAh); LG CHEM (ICR18650HE4; 3,6 V; 2500 mAh)
Degree of protection (fully installed)	IP23S
External dimensions, length	602 mm
External dimensions, width	298 mm
External dimensions, height	447 mm
Weight without accessories	27 kg
Standards	IEC 60974-1, -10

Wprog. No	Process	Wire material	Diameter	Shielding gas	Description
A01	1-MIG	AlMg5	1	Ar	Standard
A02	1-MIG	AlMg5	1,2	Ar	Standard
A11	1-MIG	AlSi5	1	Ar	Standard
A12	1-MIG	AlSi5	1,2	Ar	Standard
C01	1-MIG	CuSi3	0,8	Ar	Standard: Brazing
C03	1-MIG	CuSi3	1	Ar	Standard: Brazing
C11	1-MIG	CuAl8	0,8	Ar	Standard: Brazing
C13	1-MIG	CuAl8	1	Ar	Standard: Brazing
F01	1-MIG	Fe	0,8	Ar+18%CO2	Standard
F02	1-MIG	Fe	0,9	Ar+18%CO2	Standard
F03	1-MIG	Fe	1	Ar+18%CO2	Standard

Wprog. No	Process	Wire material	Diameter	Shielding gas	Description
F04	1-MIG	Fe	1,2	Ar+18%CO2	Standard
F11	1-MIG	Fe	0,8	Ar+8%CO2	Standard
F12	1-MIG	Fe	0,9	Ar+8%CO2	Standard
F13	1-MIG	Fe	1	Ar+8%CO2	Standard
F14	1-MIG	Fe	1,2	Ar+8%CO2	Standard
F21	1-MIG	Fe	0,8	CO2	Standard
F22	1-MIG	Fe	0,9	CO2	Standard
F23	1-MIG	Fe	1	CO2	Standard
F24	1-MIG	Fe	1,2	CO2	Standard
M04	1-MIG	Fe Metal	1,2	Ar+18%CO2	Standard
R04	1-MIG	Fe Rutil	1,2	Ar+18%CO2	Standard
R14	1-MIG	Fe Rutil	1,2	CO2	Standard
S01	1-MIG	Ss	0,8	Ar+2%CO2	Standard
S02	1-MIG	Ss	0,9	Ar+2%CO2	Standard
S03	1-MIG	Ss	1	Ar+2%CO2	Standard
S04	1-MIG	Ss	1,2	Ar+2%CO2	Standard
S82	1-MIG	FC-CrNiMo	0,9	Ar+18%CO2	Standard
S84	1-MIG	FC-CrNiMo	1,2	Ar+18%CO2	Standard
A01	P-MIG	AlMg5	1	Ar	Standard
A02	P-MIG	AlMg5	1,2	Ar	Standard
A11	P-MIG	AlSi5	1	Ar	Standard
A12	P-MIG	AlSi5	1,2	Ar	Standard
C01	P-MIG	CuSi3	0,8	Ar	Standard: Brazing
C03	P-MIG	CuSi3	1	Ar	Standard: Brazing
C11	P-MIG	CuAl8	0,8	Ar	Standard: Brazing
C13	P-MIG	CuAl8	1	Ar	Standard: Brazing
F01	P-MIG	Fe	0,8	Ar+18%CO2	Standard
F02	P-MIG	Fe	0,9	Ar+18%CO2	Standard
F03	P-MIG	Fe	1	Ar+18%CO2	Standard
F04	P-MIG	Fe	1,2	Ar+18%CO2	Standard
F11	P-MIG	Fe	0,8	Ar+8%CO2	Standard
F12	P-MIG	Fe	0,9	Ar+8%CO2	Standard
F13	P-MIG	Fe	1	Ar+8%CO2	Standard

Wprog. No	Process	Wire material	Diameter	Shielding gas	Description
F14	P-MIG	Fe	1,2	Ar+8%CO2	Standard
M04	P-MIG	Fe Metal	1,2	Ar+18%CO2	Standard
S01	P-MIG	Ss	0,8	Ar+2%CO2	Standard
S02	P-MIG	Ss	0,9	Ar+2%CO2	Standard
S03	P-MIG	Ss	1	Ar+2%CO2	Standard
S04	P-MIG	Ss	1,2	Ar+2%CO2	Standard