

# KOLARC

BUILDING THE FUTURE



# KM600 W



# KM500 W



## TECHNICAL SPECIFICATIONS

<b>Input Voltage</b>	<b>400 V</b>
<b>Mains Voltage Tolerance</b>	<b>- 10 % / + 15 %</b>
<b>Minimum Welding Current</b>	<b>10 A</b>
<b>Maximum Welding Current</b>	<b>600 A</b>
<b>MIG Duty Cycle, 40°C</b>	<b>600 A %60, 500 A %100</b>
<b>TIG Duty Cycle, 40°C</b>	<b>600 A %60, 500 A %100</b>
<b>MMA Duty Cycle, 40°C</b>	<b>600 A %60, 500 A %100</b>
<b>Open – Circuit Voltage</b>	<b>63 V - 82 V</b>
<b>Factory Delivered Roller</b>	<b>1.0 + 1.2 mm / Steel</b>
<b>Weight</b>	<b>Liquid Cooled 100 kg</b>
<b>Standard Accessories</b>	<b>5 m Power Cable ( 4 x 6 mm<sup>2</sup> ) 3 m Earth Clamp ( 70 mm<sup>2</sup> ) Interconnection H.P ( 5 m ) MX50 Remote Controlled Torch</b>
<b>Dimensions (W, L, H)</b>	<b>210mm x 215mm x 540mm</b>
<b>Certification</b>	<b>CE</b>

<b>Input Voltage</b>	<b>400 V</b>
<b>Mains Voltage Tolerance</b>	<b>- 10 % / + 15 %</b>
<b>Minimum Welding Current</b>	<b>10 A</b>
<b>Maximum Welding Current</b>	<b>500 A</b>
<b>MIG Duty Cycle, 40°C</b>	<b>500 A %40, 430 A %60, 360 A %100</b>
<b>TIG Duty Cycle, 40°C</b>	<b>500 A %40, 430 A %60, 360 A %100</b>
<b>MMA Duty Cycle, 40°C</b>	<b>500 A %40, 430 A %60, 360 A %100</b>
<b>Open – Circuit Voltage</b>	<b>63 V - 82 V</b>
<b>Factory Delivered Roller</b>	<b>1.0 + 1.2 mm / Steel</b>
<b>Weight</b>	<b>Liquid Cooled 100 kg</b>
<b>Standard Accessories</b>	<b>3 m Power Cable ( 4 x 6 mm<sup>2</sup> ) 3 m Earth Clamp ( 70 mm<sup>2</sup> ) Interconnection H.P ( 5 m ) MX50 Remote Controlled Torch</b>
<b>Dimensions (W, L, H)</b>	<b>210mm x 215mm x 540mm</b>
<b>Certification</b>	<b>CE</b>

# KM320 CW



400 V  
- 10 % / + 15 %  
10 A  
320 A  
320 A %40, 260 A %60, 240 A %100  
320 A %40, 260 A %60, 240 A %100  
320 A %40, 260 A %60, 240 A %100  
63 V - 82 V  
0.8 + 1.0 mm / Steel  
Liquid Cooled 95 kg  
4 m Power Cable (4 x 2.5 mm<sup>2</sup>)  
3 m Earth Clamp ( 50 mm<sup>2</sup>)  
Gas Hose ( 1.5 m )  
MX50 Remote Controlled Torch  
263mm x 215mm x 540mm  
CE

# KM270 C

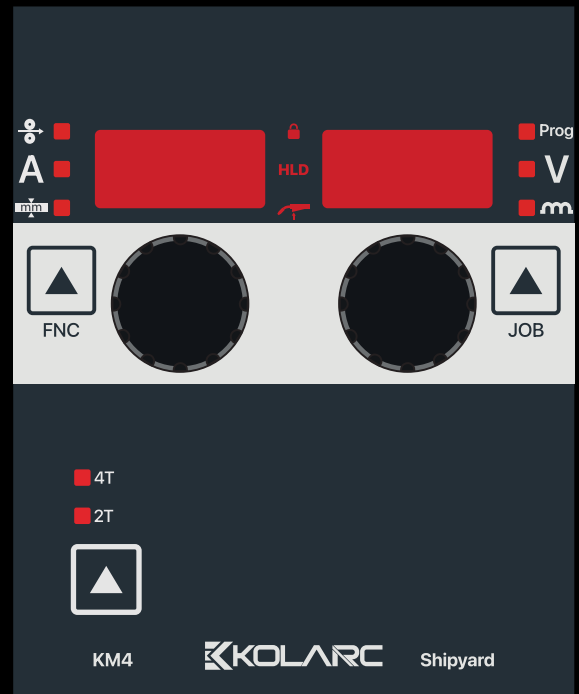
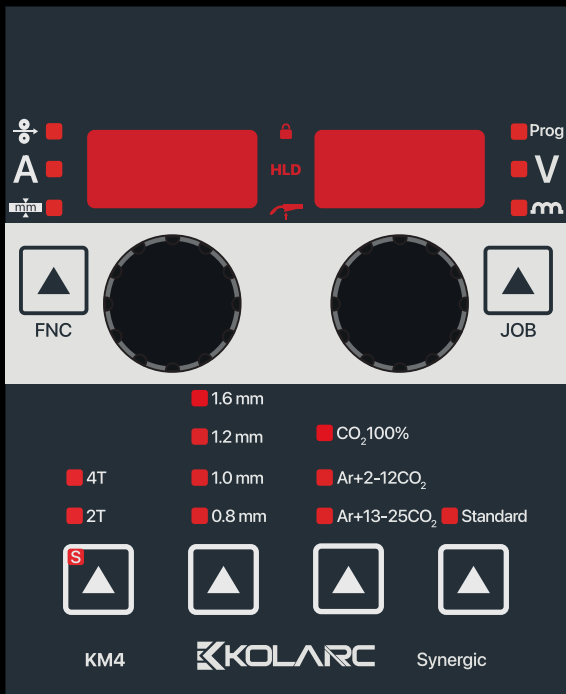
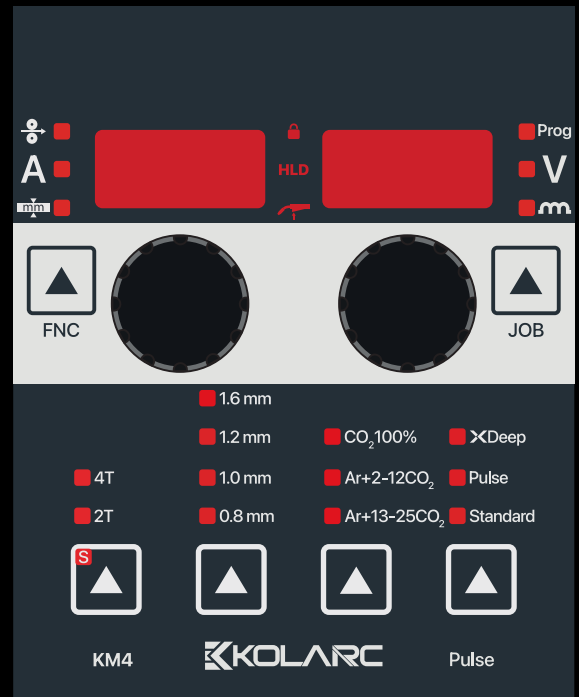
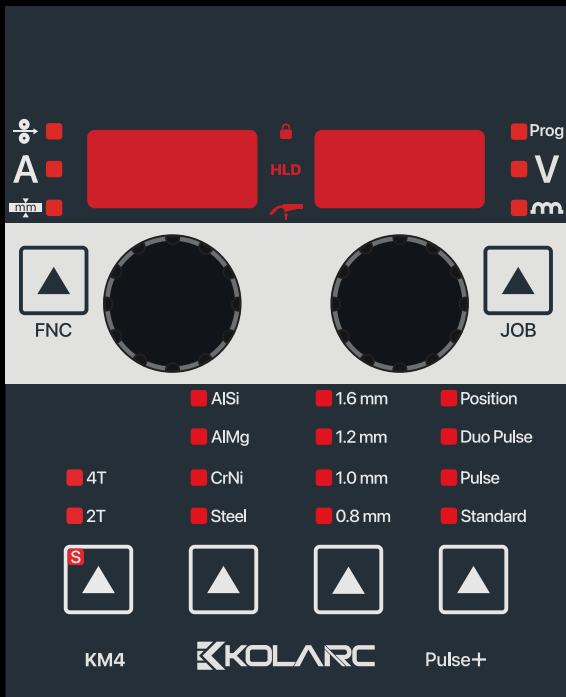


400 V  
- 10 % / + 15 %  
10 A  
270 A  
270 A %30, 215 A %60, 185 A %100  
270 A %30, 230 A %60, 195 A %100  
270 A %35, 200 A %60, 170 A %100  
63 V - 82 V  
0.8 + 1.0 mm / Steel  
Air Cooled 40 kg  
4 m Power Cable (3 x 2.5 mm<sup>2</sup>)  
3 m Earth Clamp ( 35 mm<sup>2</sup>)  
Gas Hose (1.5 m )  
MX25 Remote Controlled Torch  
210mm x 215mm x 400mm  
CE

# KM220 C

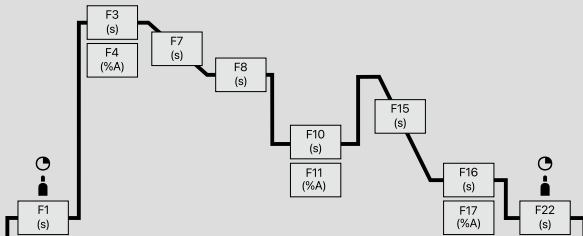


230 V  
- 10 % / + 15 %  
10 A  
220 A  
210 A %30, 170 A %60, 150 A %100  
230 A %35, 200 A %60, 170 A %100  
180 A %35, 150 A %60, 130 A %100  
63 V - 82 V  
0.8 + 1.0 mm / Steel  
Air Cooled 40 kg  
4 m Power Cable (3 x 2.5 mm<sup>2</sup>)  
3 m Earth Clamp ( 25 mm<sup>2</sup>)  
Gas Hose (1.5 m )  
MX25 Remote Controlled Torch  
210mm x 215mm x 400mm  
CE



## Pulse+ Job & Function List

Standard - Pulse		0.8	1.0	1.2	1.6	
SG2 / SG3		Ar+18%CO <sub>2</sub>	8	10	12	16
		Ar+10%CO <sub>2</sub>	18	20	22	26
		CO <sub>2</sub> 100%	28	30	32	36
CrNi	308 / 1.4316	Ar+2.5%CO <sub>2</sub>	58	60	62	66
CuSi		Ar100%	178	180	182	186
CuAl		Ar100%	188	190	192	196
AlMg4,5 Mn		Ar100%	118	120	122	126
AlSi		Ar100%	138	140	142	146
Flux Cored Wire		0.8	1.0	1.2	1.6	
Steel / FluxCore Metal		Ar+18%CO <sub>2</sub>	238	240	242	246
Steel / FluxCore Rutil		Ar+18%CO <sub>2</sub>	248	250	252	256
		CO <sub>2</sub> 100%			262	266
Steel / FluxCore Basic		Ar+18%CO <sub>2</sub>			602	
Steel FluxCore High Str.		Ar+18%CO <sub>2</sub>			592	
Steel / FluxCore Rutil		Self Shielded		720	722	
XDeep - Pulse		0.8	1.0	1.2	1.6	
SG2 / SG3		Ar+18%CO <sub>2</sub>	298	300	302	306
		Ar+10%CO <sub>2</sub>	308	310	312	316
Application						
MIG/MAG Manual		4				
TIG (Lift Arc)		5				
MMA		6				
Gouging		7				



Function	Description	Min	Max
F1	Gas pre-flow (s)	0	10
F2	Start wire speed (m/min)	1	11
F3	Start time (s)	0	10
F4	Start current (%)	1	200
F5	Start arc correction(V)	-9.9	+9.9
F7	Start slope (s)	0	5
F8	Duo peak time (s)	0.05	10
F10	Duo base time (s)	0.05	10
F11	Duo base amper (%)	1	100
F12	Duo base arc correction (v)	-9.9	+9.9
F15	End down slope (s)	0.05	10
F16	End time (s)	0	10
F17	End current (%)	1	200
F18	End arc correction (V)	-9.9	+9.9
F20	End burn back (-)	10	200
F21	End wire cut mode (-)	0	2
F22	Gas post-flow (s)	0	10
F23	Smart trigger (-)	0	1

Function	Description	Min	Max
F25	Hot start time (s)	0	10
F26	Hot start current (%)	1	200
F27	Arc force (-)	-50	+50
F28	Antistick (s)	0	2
F29	VRD function (-)	0	1

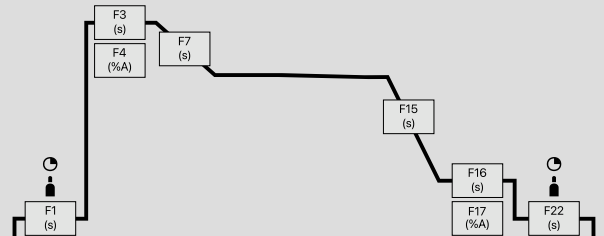
Function	Description	Min	Max
F34	Tack(stich mode (-)	0	2
F35	Cooling mode (-)	0	4
F36	Motor current (A)	0	-
F37	Motor current limit (A)	0.7	7
F38	Auto load default values (-)	0	1
F39	Motor control firmware (-)	-	-
F40	Power control firmware (-)	-	-
F41	Arc on time (h)	0	-
F42	Machine on time (h)	0	-
F45	Wire speed correction (m/min)	-2	+2
F49	Working mode	1	8
F50	RL cable calibration (mOhm)	0	30

Function	Description	Min	Max
F31	TIG V stop limit (V)	10	30
F32	TIG comfort stop sensitivity (V)	-2	+2

## Pulse / Synergic / Shipyard Job & Function List

Standard - Pulse		0.8	1.0	1.2	1.6	
SG2 / SG3		Ar+18%CO <sub>2</sub>	8	10	12	16
		Ar+10%CO <sub>2</sub>	18	20	22	26
		CO <sub>2</sub> 100%	28	30	32	36
Flux Cored Wire		0.8	1.0	1.2	1.6	
Steel / FluxCore Metal		Ar+18%CO <sub>2</sub>	238	240	242	246
Steel / FluxCore Rutil		Ar+18%CO <sub>2</sub>	248	250	252	256
		CO <sub>2</sub> 100%			262	266
Steel / FluxCore Basic		Ar+18%CO <sub>2</sub>			602	
Steel FluxCore High Str.		Ar+18%CO <sub>2</sub>			592	
Steel / FluxCore Rutil		Self Shielded		720	722	
XDeep - Pulse		0.8	1.0	1.2	1.6	
SG2 / SG3		Ar+18%CO <sub>2</sub>	298	300	302	306
		Ar+10%CO <sub>2</sub>	308	310	312	316
Application						
MIG/MAG Manual		4				
TIG (Lift Arc)		5				
MMA		6				
Gouging		7				



Function	Description	Min	Max
F1	Gas pre-flow (s)	0	10
F2	Start wire speed (m/min)	1	11
F3	Start time (s)	0	10
F4	Start current (%)	1	200
F5	Start arc correction(V)	-9.9	+9.9
F7	Start slope (s)	0	5
F11	Duo base amper (%)	1	100
F15	End down slope (s)	0.05	10
F16	End time (s)	0	10
F17	End current (%)	1	200
F18	End arc correction (V)	-9.9	+9.9
F20	End burn back (-)	10	200
F21	End wire cut mode (-)	0	2
F22	Gas post-flow (s)	0	10
F23	Smart trigger (-)	0	1

Function	Description	Min	Max
F25	Hot start time (s)	0	10
F26	Hot start current (%)	1	200
F27	Arc force (-)	-50	+50
F28	Antistick (s)	0	2
F29	VRD function (-)	0	1

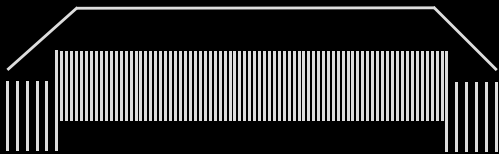
Function	Description	Min	Max
F34	Tack(stich mode (-)	0	2
F35	Cooling mode (-)	0	4
F36	Motor current (A)	0	-
F37	Motor current limit (A)	0.7	7
F38	Auto load default values (-)	0	1
F39	Motor control firmware (-)	-	-
F40	Power control firmware (-)	-	-
F41	Arc on time (h)	0	-
F42	Machine on time (h)	0	-
F45	Wire speed correction (m/min)	-2	+2
F49	Working mode	1	8
F50	RL cable calibration (mOhm)	0	30

Function	Description	Min	Max
F31	TIG V stop limit (V)	10	30
F32	TIG comfort stop sensitivity (V)	-2	+2

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## Program Memory

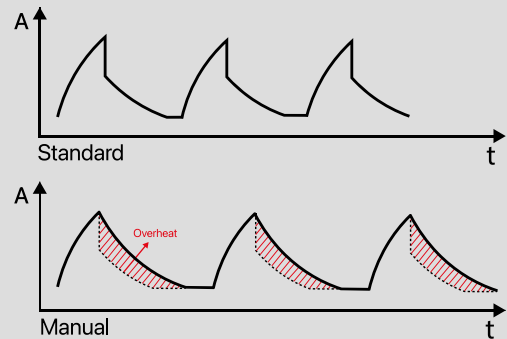


## Pulse

Pulse eliminates post-weld cleaning and spatter in the welding of aluminum, stainless steel and all metal alloys, providing flawless welding performance.



XDeep operates in the spray arc area, using high-frequency, low-amplitude current pulses to provide high feed rate and low heat input for steel and stainless steel welding in the PA and PB positions, effectively reducing labor time and welding costs.



## Synergic (Standard)

Synergic keeps the voltage constant after droplet transfer by rapidly reducing the welding current vertically to a certain reference level. This increases the welding speed, resulting in low heat input and an intensified arc.



