

Powertec® 305S, 365S, 425S, 505S

Powerful potential

With the full range of Powertec® power sources and the LF22M & 24M (Pro) wire feeders, Lincoln is able to offer you unrivalled choice of step voltage MIG machines. With multiple output levels available across the power source range; 2 or 4 roll feeders with or without meters and a variety of interchangeable features, the choice is huge: there are 12 different combinations which give the Powertec® range unparalleled flexibility. Design of the LF22M, 24M and 24M Pro feeders focused on ruggedness, physical dimensions and ease of use. The result is an incredibly rugged casing with the primary controls on the exterior and secondary controls secure within the protective casing close to the wire drive.

Features

- Products developed with a focus on applications.
- Superb Arc behaviour with Argon Mix and 100% CO₂.
- Voltage selectors with multiple steps for precise adjustment.
- Two choke tabs to support superb Arc behaviour
- Fan as needed (F.A.N.™).
- Synergic control to support easy control by the welder with LF24M Pro.
- Bright digital volt and ammeter with LF24M and LF24M Pro.
- Completed with an extensive set of features.
- Large diameter wheels, push/pull bar and lifting eyes.
- Easy to convert to water-cooled by simply adding the Coolarc 25 (except PT 305S).



Technical Specifications

Product	Item Number	Primary Voltage (50-60Hz)	Current Range (A)	Rated Output	Fuse Size (A) (slow)	Weight (kg)	Dimensions HxWxD (mm)	Protection/ Insulation Class
Powertec® 305S	K14060-1	230/400V/3Ph	30-300	300A/29V@35% 230A/25.5V@60%	32/20	94	770 x 467 x 930	IP23 / H
Powertec® 365S	K14061-1A K14061-2A	230/400V/3Ph 220/380/440/3Ph	30-350	350A/31.5V@40% 285A/28.2V@60%	40/25	141	875 x 700 x 1035	
Powertec® 425S	K14062-1A K14062-2A	230/400V/3Ph 220/380/440/3Ph	30-420	420A/35V@40% 345A/31.5V@60%	50/32	151		
Powertec® 505S	K14063-1A K14063-2A	230/400V/3Ph 220/380/440/3Ph	30-500	500A/39V@40% 400A/34.5V@60%	63/40	157		

Technical Specifications of Wire Feeders

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Product	Item Number	Cooling	Input Power	WFS Range (m/min)	Wire Size Range (mm)		Weight (kg)	Dimensions HxWxD (mm)
					Solid	Cored		
LF-22M	K14064-1	A	34-44V AC	1-20	0.8-1.6	1.0-1.6	15	440 x 275 x 636
LF-24M	K14065-1W	A/W					17	
LF-24M PRO	K14066-1W						17	

Processes

- MIG
- Flux-cored



Recommended Consumables

- **Steel**
Ultramag®, Supramig®, Supramig Ultra®
- **Flux-cored**
Innershield® NR211-MP, Outershield® MC710-H
- **Stainless steel**
LNM 304L, 316L, 309LSi
- **Aluminium**
SuperGlaze®

Unit Includes

- Undercarriage
- 5 m-input cable
- Work clamp and cable assembly (3 m)

Recommended Packages

- LF22M or LF24M or LF24M pro wire feeder
- Powertec® power source on undercarriage, Input cable, Work clamp and cable assembly + COOL ARC® 25 for water cooled version
- 5 m-Interconnection cable, MIG gun and gas regulator

Key Options

- K10347-PG(W)-xM Interconnection cables
- K10429-25-xM MIG gun LGS 250 G – 200A – 3/4/5 m
- K10413-25PHD-xM MIG gun LGP 250 G – 200A – 3/4/5 m
- K10413-25FX-xM MIG gun LG 250 G FX – 200A – 3/4/5 m
- K10429-36-xM MIG gun LGS 360 G – 300A – 3/4/5 m
- K10413-36PHD-xM MIG gun LGP 360 G – 300A – 3/4/5 m
- K10429-505-xM MIG gun LGS 505 W – 450A – 3/4/5 m
- K10413-55PHD-xM MIG gun LGP 550 W – 500A – 3/4/5 m
- K10158-1 Readi-reel mounting stand (15 kg)
- K14071-2 DR system kit (grill)
- K14009-1 CO₂ heater connection kit
- K14037-1 Water cooler COOL ARC® 25
- K10420-1 Coolant Acorox (2x5l)

INPUT



OUTPUT



Technical Specifications

NAME				INDEX	
POWERTEC 365S				K14061-2A	
POWERTEC 425S				K14062-2A	
POWERTEC 505S				K14063-2A	
INPUT					
365S	Input Voltage U ₁		EMC Group / Class		Frequency
	220 / 380 / 440V±10% 3 - phase		II / A		50 / 60 Hz
365S	Input Power at Rated Cycle		Input Amperes I _{1max}		cos φ
	16 kVA @ 40% Duty Cycle		43 A		0,95
425S	21 kVA @ 40% Duty Cycle		62 A		0,96
505S	29,9 kVA @ 40% Duty Cycle		79 A		0,96
RATED OUTPUT					
365S	Duty Cycle 40°C (based on a 10 min. period)		Output Current		Output Voltage
	40%		350 A		31,5 Vdc
	60%		285 A		28,2 Vdc
	100%		220 A		25 Vdc
425S	40%		420 A		35 Vdc
	60%		345 A		31,3 Vdc
	100%		265 A		27,3 Vdc
505S	40%		500 A		39 Vdc
	60%		410 A		34,5 Vdc
	100%		315 A		29,8 Vdc
OUTPUT RANGE					
365S	Welding Current Range			Open Circuit Voltage	
	35 A ÷ 350 A			16 ÷ 48 Vdc	
425S	35 A ÷ 420 A			15 ÷ 56 Vdc	
505S	40 A ÷ 500 A			18 ÷ 60 Vdc	
RECOMMENDED INPUT CABLE AND FUSE SIZES					
365S	Fuse or Circuit Breaker Size			Power Lead	
	220V	380V	440V		
	D 40 A	D 25 A	D 25 A	365S	4 Conductor, 4 mm ²
425S	D 50 A	D 32 A	D 32 A	425S	4 Conductor, 6 mm ²
505S	D 63 A	D 40 A	D 40 A	505S	4 Conductor, 6 mm ²
DIMENSION					
365S	Weight		Height	Width	Length
	141 kg		880 mm	700 mm	1030 mm
425S	151 kg		880 mm	700 mm	1030 mm
505S	159,5 kg		880 mm	700 mm	1030 mm
Protection Rating		Operating Humidity (t=20°C)		Operating Temperature	Storage Temperature
IP23		≤ 90 %		from -10 °C to +40 °C	from -25 °C to +55 °C