

Technical Sheet

Model Z 10P1 3

V112024





High pressure compressor designed to work with laser machinery.

COMPRESSED AIR

The FORZA Compressor Z10 is a complete 4-in-1 air compressor: tank, compressor, dryer, and filters. It guarantees clean compressed air output at constant pressure and flow thanks to its Variable Speed Control (VSC) motor technology.

It is ideal for working with laser machinery since compressed air is required at a constant pressure and flow to prevent damage and obtain clean cuts, eliminating any burrs produced.



Specific characteristics

FEATURE	<u>DETAIL</u>
Application	Compressed air
Maximum outlet pressure	13 bar 188.5 psi
Output air flow/quantity	0.85 m3 /min 30 cfm
Main engine power	7.5 kW 10 HP
Air tank volume	280 L 74 gal
Working voltage	220V 1ph 50/60 Hz
Ideal laser machine to supply	1500W







Special Features



RLA

General Specifications

Mana of supplyAir44n-1 setCompressor, tank, dryer, filtersReifigeration systemBy larOutput air flow/quantityos m3 /min 30 cmMaximum outlet pressure15 bar 188.5 palOutput pressure accuracy60%Maximum air humidity in supply<60%Moninal atmospheric pressure0.1 MPa 14.5 psiNoreinal atmospheric pressure0.1 MPa 14.5 psiNoreinal atmospheric pressure970 daNotice levelyro m/sNotice levelyro m/sNotice level920 ppmNation name regime93 ppmMain engine power200 rpmMain engine power55 kW 10 hpRated speed of the main engine200 rpmMain engine start modeFMain engine weight200 rpmMain engine weight200 rpmMainter per leme200 rpmMainter per leme200 rpmMainter per leme200 rpmMainter per	SPECIFICATION	DETAIL
Mana of supplyAir41-1 setCompressor, tank, dryer, filtersReifigeration systemBy larOutput air flow/quantityosg m3 /min 10 ofmMaximum outlet pressure10 tank 168.5 piOutput pressure accuracya0.1 MPaMaximum air humidity in supply<60%	Model	FORZA COMPRESSOR Z - Z10P13
Ain 1 set Compressor, tank, dysr, filters Refrigeration system By lar Output air flow/quantity 0.85 m3 /min 130 cfm Maximum outlet pressure 13 bar 1 188.5 psi Output pressure accuracy e0.1 MPa Maximum air hundidity in supply <60%	Compressor technology type	Screw thrust
By air Output air flow/quantity 0.45 m3 /min 30 cfm Maximum outlet pressure 13 bar 186.5 psi Output pressure accuracy 60% Maximum outlet pressure 60% Maximum air humidity in supply 60% Nominal atmospheric pressure 0.1 MPa 14.5 psi Moring temperature 0.1 MPa 14.5 psi Noise tevel 970 dB Vitration level 970 ms/s Output pressure accuracy 60% Main ongine power 75 kW 10 hp Rated speed of the main engine 200 tpm Main engine start mode Variable speed drive (VSD) Moring unging weight 2001 L f 4 gal Atra kolume 2012 V j 10 hp lo Main engine weight 2012 L f 4 gal Main engine weight 2012 L f 4 gal Maximum current per line 40A 8 220VAC 1ph Required wire gauge of the box broaker 61 A 220VAC 1ph Mained vire gauge of the main lengine 61 A 220VAC 1ph Maximum current per line 61 A 220VAC 1ph Maximum current per line 61 A 62 220VAC 1ph	Means of supply	Air
Output air flow/quantity0.45 m3 /min 30 cfmMaximum outlet pressure13 bar 186.5 pslOutput pressure accuracy40.1 MPaMaximum air humidity in supply<60%	4-in-1 set	Compressor, tank, dryer, filters
Maximum outlet pressuredoes ints min a beinMaximum outlet pressure13 bar 188.5 pslOutput pressure accuracye.01 MPaMaximum air humidity in supply<60%	Refrigeration system	By air
Current per accuracy40.1 MPaMaximum air humidity in supply<60%	Output air flow/quantity	0.85 m3 /min 30 cfm
Notice process backet by < 60%	Maximum outlet pressure	13 bar 188.5 psi
Nominal atmospheric pressure 0.1 MPa 14.5 psi Working temperature 2-45 °C Noise level y70 dB Noise level y70 ms/s Warking temperature 970 dB Vibration level y70 ms/s Male outlet thread diameter R1" Outlet air purity level j3 ppm Main engine power 2400 rpm Rated speed of the main engine 2400 rpm Main engine start mode P Main engine weight 2skg Norking voltage 2201 / 14 gal Working voltage 2202 Vach 1ph Maximum current per line 40A @ 220VAC 1ph Art 10 AWG Ground 215 AWG @ 220VAC 1ph strate volte deveker for the machine 60 A @ 220VAC 1ph Working voltage 60 A @ 220VAC 1ph strate of the complete equipment 60 A @ 220VAC 1ph compended breaker for the machine 60 A @ 220VAC 1ph Weight of the complete equipment 500 x 730 x 1350mm 1.5x7x1.4m	Output pressure accuracy	±0.1 MPa
Working temperature2 - 45 °CNoise levely70 dBVibration levely7 mm/sMale outlet thread diameterR1"Outlet air purity levely3 ppmMain engine power.5 kW 10 hpRated speed of the main engine2400 rpmMain engine start modeVariable speed drive (VSD)Motor insulation classFMain engine weight20k 74 galAir tank volume220 / 1ph S0Hz-60HzWorking voltage220 / 1ph S0Hz-60HzRequired wire gauge of the box breaker2 k GAWG @ 220VAC 1ph + 1 x 10AWG GroundRecommended breaker for the machine60 A @ 220VAC 1ph + 1 x 10AWG GroundWeight of the complete equipment400 kgComplete equipment measurements1500 x 730 x 1350mm 1.5x7x1.4mIP protectionIP55	Maximum air humidity in supply	< 60%
Noise level y70 dB Vibration level y7 mm/s Male outlet thread diameter y3 ppm Outlet air purity level y3 ppm Main engine power x5 kW 10 hp Rated speed of the main engine 2400 rpm Main engine start mode Variable speed drive (VSD) Motor insulation class F Main engine weight 280 L 74 gal Air tank volume 2200 rph Working voltage 200 t / hp SoHz-coHz Required wire gauge of the box breaker for the machine 40A @ 220VAC 1ph Recommended breaker for the machine 60 A @ 220VAC 1ph Weight of the complete equipment 400 kg Complete equipment measurements 150 x 730 x 1350mm 1.5x7x1.4m	Nominal atmospheric pressure	0.1 MPa 14.5 psi
NoteVibration level97 mm/sMale outlet thread diameterR1"Outlet air purity level93 ppmMain engine power7.5 kW 10 hpRated speed of the main engine2400 rpmMain engine start modeVariable speed drive (VSD)Motor insulation classFMain engine weight2skgAir tank volume200 L 74 galWorking voltage201 V lph Soltz-60HzRequired wire gauge of the box breaker2x 6AWG @ 220VAC 1ph +1 x 10AWG GroundRecommended breaker for the machine60 A @ 220VAC 1ph +1 x 10AWG GroundRecommended breaker for the machine500 x 730 x 1350mm 1.5x7x1.4mPip rotection1500 x 730 x 1350mm 1.5x7x1.4m	Working temperature	2 – 45 °C
Male outlet thread diameter R1" Outlet air purity level ÿ3 ppm Main engine power r,5 kW 10 hp Rated speed of the main engine 2400 rpm Main engine start mode Variable speed drive (VSD) Motor insulation class F Main engine weight 25kg Air tank volume 2201 74 gal Working voltage 2001 rph Required wire gauge of the box breaker for the machine 2 x 6AWG @ 220VAC 1ph Recommended breaker for the machine 60 A @ 220VAC 1ph Weight of the complete equipment 400 kg Complete equipment measurements 1500 x 730 x 1350mm 1.5x7x1.4m Protection 1550 x 730 x 1350mm 1.5x7x1.4m	Noise level	ÿ70 dB
Outlet air purity levelj3 ppmOutlet air purity levelj3 ppmMain engine power.5 kW 10 hpReted speed of the main engine400 rpmMain engine start modeVariable speed drive (VSD)Motor insulation classFMain engine weight20k 74 galAir tank volume201 / 1ph 50H2-60H2Working voltage200 / 1ph 50H2-60H2Required wire gauge of the box breaker2 x 6AWG @ 220VAC 1ph + 1 x 10AWG GroundRecommended breaker for the machine60 A @ 220VAC 1ph + 1 x 10AWG GroundRecommended breaker for the machine1500 x 730 x 1350mm 1.5x7x1.4mPip rotectionI55	Vibration level	ÿ7 mm/s
Main engine power r.5 kW 10 hp Rated speed of the main engine 2400 rpm Main engine start mode Variable speed drive (VSD) Motor insulation class F Main engine weight 25kg Air tank volume 200 L 74 gal Working voltage 200 L 74 gal Maximum current per line 40A @ 220VAC 1ph Required wire gauge of the box breaker 2 x 6AWG @ 220VAC 1ph Recommended breaker for the machine 60 A @ 220VAC 1ph Weight of the complete equipment 400 kg Yoo x 730 x 1350mm 1.5x7x1.4m 1550 x 730 x 1350mm 1.5x7x1.4m	Male outlet thread diameter	R1"
Rated speed of the main engine2400 rpmMain engine start modeVariable speed drive (VSD)Motor insulation classFMain engine weight25kgAir tank volume280 L 74 galWorking voltage220V 1ph 50Hz-60HzMaximum current per line40A @ 220VAC 1phRequired wire gauge of the box breaker2 x 6AWG @ 220VAC 1phRecommended breaker for the machine60 A @ 220VAC 1phWeight of the complete equipment400 kgIP protectionIP55	Outlet air purity level	ÿ3 ppm
Main engine start mode Variable speed drive (VSD) Motor insulation class F Main engine weight 25kg Air tank volume 280 L 74 gal Working voltage 220V 1ph 50Hz-60Hz Maximum current per line 40A @ 220VAC 1ph Required wire gauge of the box breaker 2 x 6AWG @ 220VAC 1ph Recommended breaker for the machine 60 A @ 220VAC 1ph Weight of the complete equipment 400 kg IP protection 1500 x 730 x 1350mm 1.5x7x1.4m	Main engine power	7.5 kW 10 hp
Motor insulation class F Main engine weight 25kg Air tank volume 280 L 74 gal Working voltage 202 V 1ph 50Hz-60Hz Maximum current per line 40A @ 220VAC 1ph Required wire gauge of the box breaker 2x 6AWG @ 220VAC 1ph Recommended breaker for the machine 60 A @ 220VAC 1ph Weight of the complete equipment 400 kg IP protection IP55	Rated speed of the main engine	2400 rpm
Nain engine weight25kgAir tank volume200 L 74 galWorking voltage200 V 1ph 50Hz-60HzMaximum current per line40A @ 220VAC 1phRequired wire gauge of the box breaker2x 6AWG @ 220VAC 1phRecommended breaker for the machine60 A @ 220VAC 1phRecommended breaker for the machine400 kgComplete equipment measurements1500 x 730 x 1350mm 1.5x7x1.4mIP protectionIP55	Main engine start mode	Variable speed drive (VSD)
Air tank volume280 L 74 galWorking voltage220V 1ph 50Hz-60HzMaximum current per line40A @ 220VAC 1phRequired wire gauge of the box breaker2 x 6AWG @ 220VAC 1ph +1 x 10AWG GroundRecommended breaker for the machine60 A @ 220VAC 1phWeight of the complete equipment400 kgComplete equipment measurements1500 x 730 x 1350mm 1.5x7x1.4mIP protectionIP55	Motor insulation class	F
Working voltage200 L 14 gaiWorking voltage220V 1ph 50Hz-60HzMaximum current per line40A @ 220VAC 1phRequired wire gauge of the box breaker2 x 6AWG @ 220VAC 1phH x 10AWG Ground60 A @ 220VAC 1phRecommended breaker for the machine60 A @ 220VAC 1phWeight of the complete equipment400 kgComplete equipment measurements1500 x 730 x 1350mm 1.5x7x1.4mIP protectionIP55	Main engine weight	25kg
Maximum current per line 40A @ 220VAC 1ph Required wire gauge of the box 2 x 6AWG @ 220VAC 1ph breaker 1 x 10AWG Ground Recommended breaker for the machine 60 A @ 220VAC 1ph Weight of the complete equipment 400 kg Complete equipment measurements 1500 x 730 x 1350mm 1.5x7x1.4m IP protection IP55	Air tank volume	280 L 74 gal
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breaker +1 x 10AWG Ground Recommended breaker for the machine 60 A @ 220VAC 1ph Weight of the complete equipment 400 kg Complete equipment measurements 1500 x 730 x 1350mm 1.5x7x1.4m IP protection IP55	Maximum current per line	40A @ 220VAC 1ph
+1 x 10AWG Ground Recommended breaker for the machine 60 A @ 220VAC 1ph Weight of the complete equipment 400 kg Complete equipment measurements 1500 x 730 x 1350mm 1.5x7x1.4m IP protection IP55	Required wire gauge of the box	2 x 6AWG @ 220VAC 1ph
Weight of the complete equipment 400 kg Complete equipment measurements 1500 x 730 x 1350mm 1.5x7x1.4m IP protection IP55	breaker	+1 x 10AWG Ground
Complete equipment measurements 1500 x 730 x 1350mm 1.5x7x1.4m IP protection IP55	Recommended breaker for the machine	60 A @ 220VAC 1ph
IP protection IP55	Weight of the complete equipment	400 kg
	Complete equipment measurements	1500 x 730 x 1350mm 1.5x7x1.4m
Certifications CE, RoHS	IP protection	IP55
	Certifications	CE, RoHS





Applicable materials

All materials that can be cut with air are described; cutting thicknesses depend on the power of the laser equipment.



Black steel should be cut with oxygen, however thin thicknesses can be worked with air.

Cutting thicknesses by material

Thicknesses depend on the power of the machine's laser; the following table corresponds to work with a 6000W machine.

MATERIAL	NOMINAL THICKNESS WITH AIR	
ASTM A36 ("Black or Mild") Steel	1.5mm 1/16in	
ASTM 304 STAINLESS STEEL	4mm 5/32in	
STRUCTURAL ALUMINUM ASTM 6061	3mm 1/8in	
BRASS C27200	2mm 5/64in	
Galvanized Steel ASTM A653	1.25mm 3/64in	







ltem	Measures	Net Weight	Gross Weight	СВМ
(1)	W: 1500mm L: 730mm H: 1350mm	400kg	450kg	1.48

Manufactured Parts:





With Forza Laser laser specialists, our team has everything you need to grow your own business to the fullest.

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