PM-TK Series Product introduction BCCD

Revised by Emma Kwok (Nov.10th,2020)

Why we need pure and dry compressed air?

Laser cutting with filtered, compressed air can be faster than cutting with oxygen or nitrogen—typically 300 to 320 ipm—and although there is an initial investment in the proper equipment, filtered, compressed air costs less in the long term due to its lower cost compared to "traditional" assist gases.

Common faults for laser cutting machine:

- Burn the inner wall of len
- The wire and thread of lens blend into one
- Badly damage to focusing len
- Mist or grease occur to reflector
- The interation pin is damaged



Compressed air with fog and oil will affect the beam transmission and lead to seriously focus decentraliztion when spray to lens, finally result in incomplete piercing and defect products.



Reasons that you choose PM-TK series

- Integration of air compressor, air tank, and air dryer
- Save the troble of installation
- Save you time and cost to communicate with various of suppliers for different component
- Concentrate your energy in post-sales service or maintenance
- Less components, less loss after long-term working



2 Reasons that you choose PM-TK series

- Smart IoT system--self-patent **Baldor Cloud(easy for** checking from PC port or mobile port).
- Instant and 24 hours-continuous monitoring supported
- Running failure data and warning reports history playback supported.
- With your account log in, multiple machines are under monitoring from anywhere and anytime.



Log in account through APP ports can track all information of compressor at any place at any time and so that you can take quick response to solve problem of compressor.

Reasons that you choose PM-TK series

- High efficient PM VSD screw air compressor
- Stable pressure helps a smoothly cutting
- working noise less than 70dB(A)



Integrated Air Compressor for laser cutting

- Provide clean and dry compressed air for laser cutting equipments.
- ——Pressure dew point $2-8^{\circ}C(35.6^{\circ}F-46.4^{\circ}F)$
- ——oil content in compressed air is no more than 0.01ppM
- ——Particle filtration accuracy is 0.01µm





Design features of Integrated compressor for laser cutting

- Integration of air compressor, air receiver, refrigerated dryer and micro-filters, easy to install
- Save the trouble from installing air receiver tank, air dryer and filters for customers
- Save the trouble from the installation of pipelines
- Save the trouble from the inconveniency of requiring multiple vendors in providing services
- PM VSD screw compressor ensures that the working pressure is always stable.
- Efficient refrigerated dryer and 4-stage high-efficiency precision filters ensure clean compressed air with a pressure dew point as low as 2-8°C.
- After-treatment with stainless steel pipe to avoid secondary pollution
- The vibration-damping design with the flexible pipeline to effectively reduce vibration and noise, and the running noise is <70dB(A).
- The start and stop of the cooling fan can be set according to the season to better control the oil temperature and avoid milk of oil.
- Post-treatment with centralized drainage, which helps keep clean on site





Integrated Air Compressor for laser cutting

Technical date of integrated compressor for laser cutting						
Model	Nominal volume flow (m³/min)	Rated discharge pressure (MPa)	Motor power (kW)	Start-up mode	Dimensions (L*W*H mm)	Air outlet size
BD-11TK	0.97	1.6	11	VFD startup	1592*747*1586	Rc3/4"
BD-15TK	1.27		15			
BD-18TK	1.80		18.5		1712*800*1860	Rc3/4"
BD-22TK	2.30		22			
BD-22TK-25	1.2	2.5	22		1716*830*1862	Rc3/4"

Thank you!!!



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