

## Air Power Source APS Model ZT010-8

### Introduction:

The Air Power Source has become an integral part of the Shiftec range. Since its introduction in 2012 it has recorded class successes at both Le Mans and Daytona 24hr races and stage wins at WRC level.

The combination of low power consumption with lightweight and easy packaging means it is suitable for both saloon and single seater vehicles where space may be at a premium.

The unit combines an air compressor with an accumulator, removing the need for extra pressure vessels and hoses. A bespoke control unit allows precise motor operation and ensures maximum efficiency. The unit can run as a stand alone or be controlled and monitored over a CAN bus system. In stand alone form the pressure range can be preset and the APS will self regulate with only power and ground connections required.

The casing is CNC machined from high grade 7075 aluminium alloy and anodised for protection in all conditions. For customers competing in dusty conditions there is an optional remote air filter hose and adaptor kit available.



### Summary:

- Low current consumption
- Lightweight
- Simple vehicle installation
- Data logging
- CAN communication
- User programmable parameters
- Easy interface
- Dash 4 JIC air feed fitting
- Autosport power connector
- Mounting feet
- Designed in cooling vanes
- Optional remote filter kit
- Proven durability in 24hr races and WRC rallies

### System requirements:

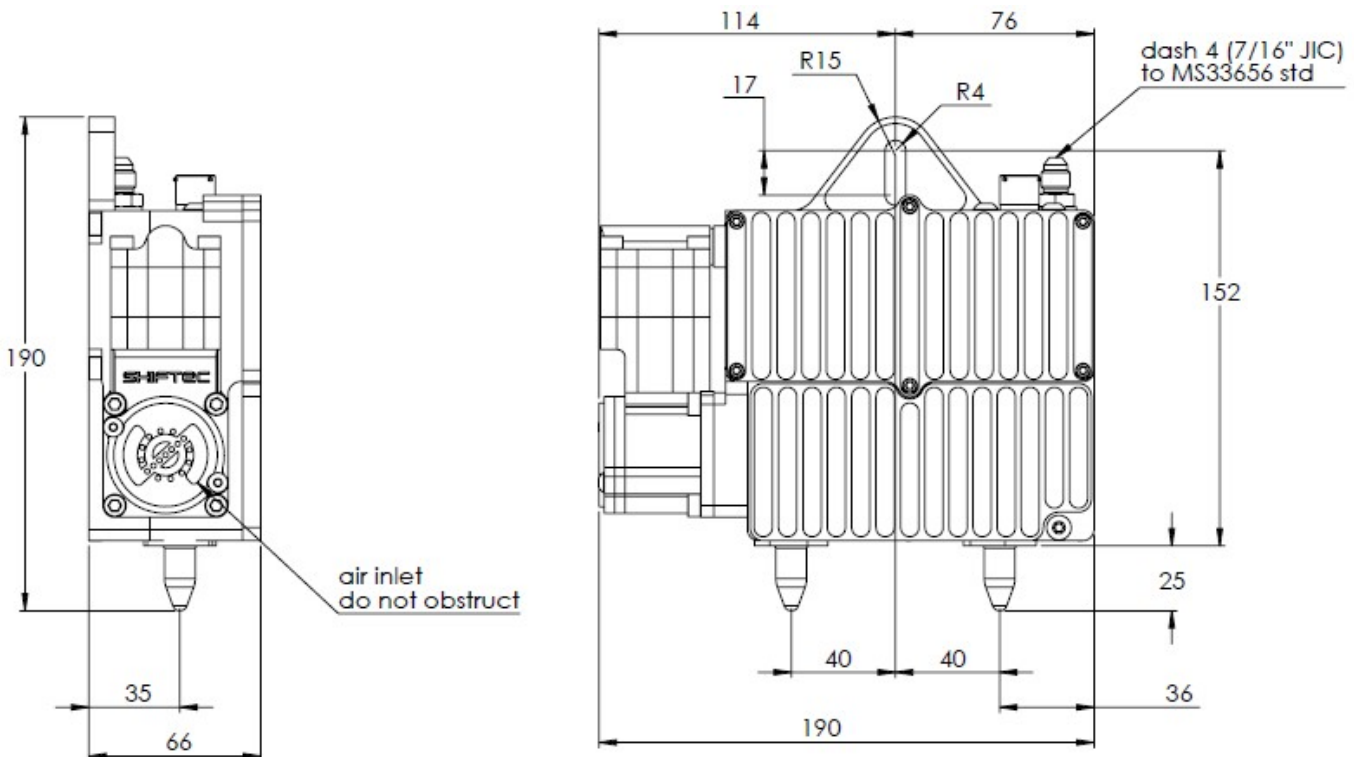
Current consumption - compression	.....	18	A typical	25A max
Ambient working temperature	.....	-25 to +75	°C	
Voltage range	.....	8-16	V	
Maximum current	.....	45	A (motor stalled)	
Installation notes	.....	See Appendix 1		

### Technical data:

Maximum operating pressure	.....	9.8	bar
Max duty cycle at 25°C	.....	60	%
Max on time for any one cycle	.....	40	secs
Pressure rise time 0 – 7.5bar	.....	12	secs max
Fitting air out	.....	Dash 4	JIC male
AV mounting pegs	.....	2	off
Top mounting lug	.....	1	off
Environmental protection	.....	IP6K4K	

### Dimensions:

Length	.....	190	mm
Width	.....	66	mm
Height	.....	190	mm
Weight	.....	1800	g



### Ordering information:

Description	Part number
Air Power Source APS	ZT010-8
Remote air filter kit APS	ZL020-1

## Appendix 1

### Installation notes

- Requires clean, dry air supply
- Install away from direct heat sources.
- Use copperslip when attaching hose fittings – not Loctite or PTFE tape.
- Use only aluminium or stainless steel hose fittings
- Keep vent hole clean of dirt and debris.
- Drain moisture from unit after race weekend useage
- Service interval of 30hrs or 6000km.

## Appendix 2

### Wiring details

Connector fitted on APS ..... AS010 35PN  
 Connector required on chassis ..... AS610 35SN

Pin no	Definition
1	+12V Battery
2	+12V Battery
3	+12V Battery
4	+12V Battery
5	GND
6	GND
7	GND
8	GND
9	CAN Hi
10	CAN Lo
11	+12V battery - clean supply low power
12	+12V Battery
13	GND