

Subject
H400003 24 V Hydraulic Driven Air Compressor Installation

OVERVIEW

The H400003 employs a 24 V to 12 V converter to power the control system while utilizing a 24 V fan powered via a relay.

UPFITTER ELECTRICAL REQUIREMENTS

The H400003 has a maximum nominal current draw of 16 A while all systems are engaged; install a 25 A fuse to protect the system and prevent the fuse from blowing unnecessarily due to the fan “inrush” current.

Size the wire appropriately to ensure that no more than 4 % voltage drop is experienced under full load.

24 V Wire Sizing Guide	
Combined length of power and ground wires	Recommended wire gauge
Less than 10 ft (3 m)	14 AWG
Between 10 ft (3 m) and 18 ft (5.5 m)	12 AWG
18 ft (5.5 m) to a maximum of 35 ft (10.5 m)	10 AWG



VMAC does not recommend installing the system in a location that would require a combined wire length greater than 35 ft (10.5 m).

UPFITTER ELECTRICAL CONNECTIONS (Figure 1 and Figure 2)

4-pin square, main upfitter connector (mating connector with blunt cut wires provided) (Figure 1):

- PIN A: Idle up output, used to sink current from a relay to provide a signal to increase engine speed (24 V tolerant).
- PIN B: Ground.
- PIN C: 24 V input.

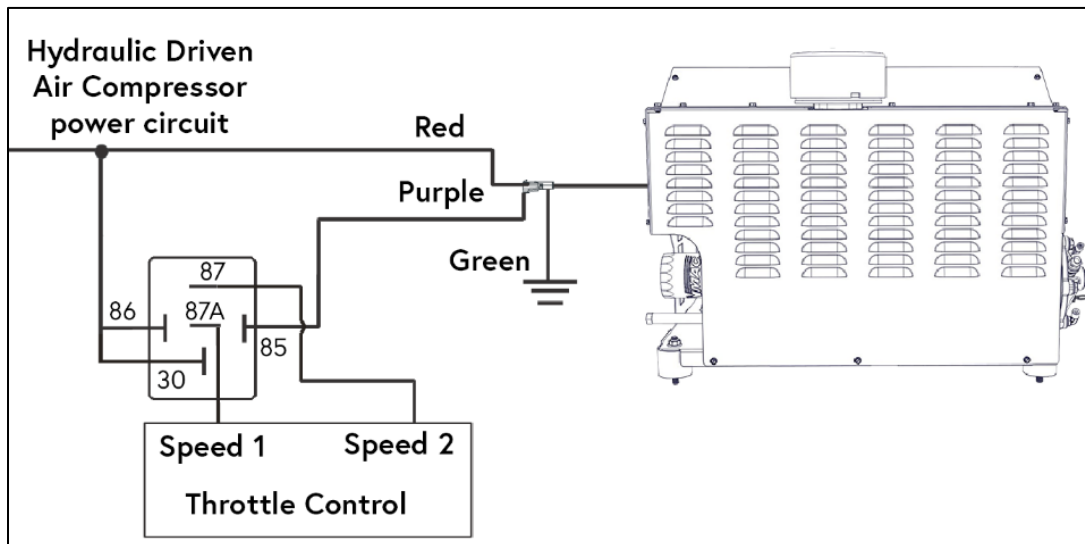


Figure 1 – 4 pin upfitter connector

Yellow “remote switch” wire:

- Connect to a switched ground to remotely enable or disable the H40 without using the display.

4-pin flat, display connector:

- Use stub-harnesses to route the display box to a convenient location and connect.

Document: 1901102

Revision	Revision Details	Revised by	Checked by				Implemented
			Eng.		Tech.	Qual.	
			Mech.	Elec.			
A	Initial Release	MSP	JKR	N/A	GB	AWM	27 Sept 2018

Subject
H400003 24 V Hydraulic Driven Air Compressor Installation

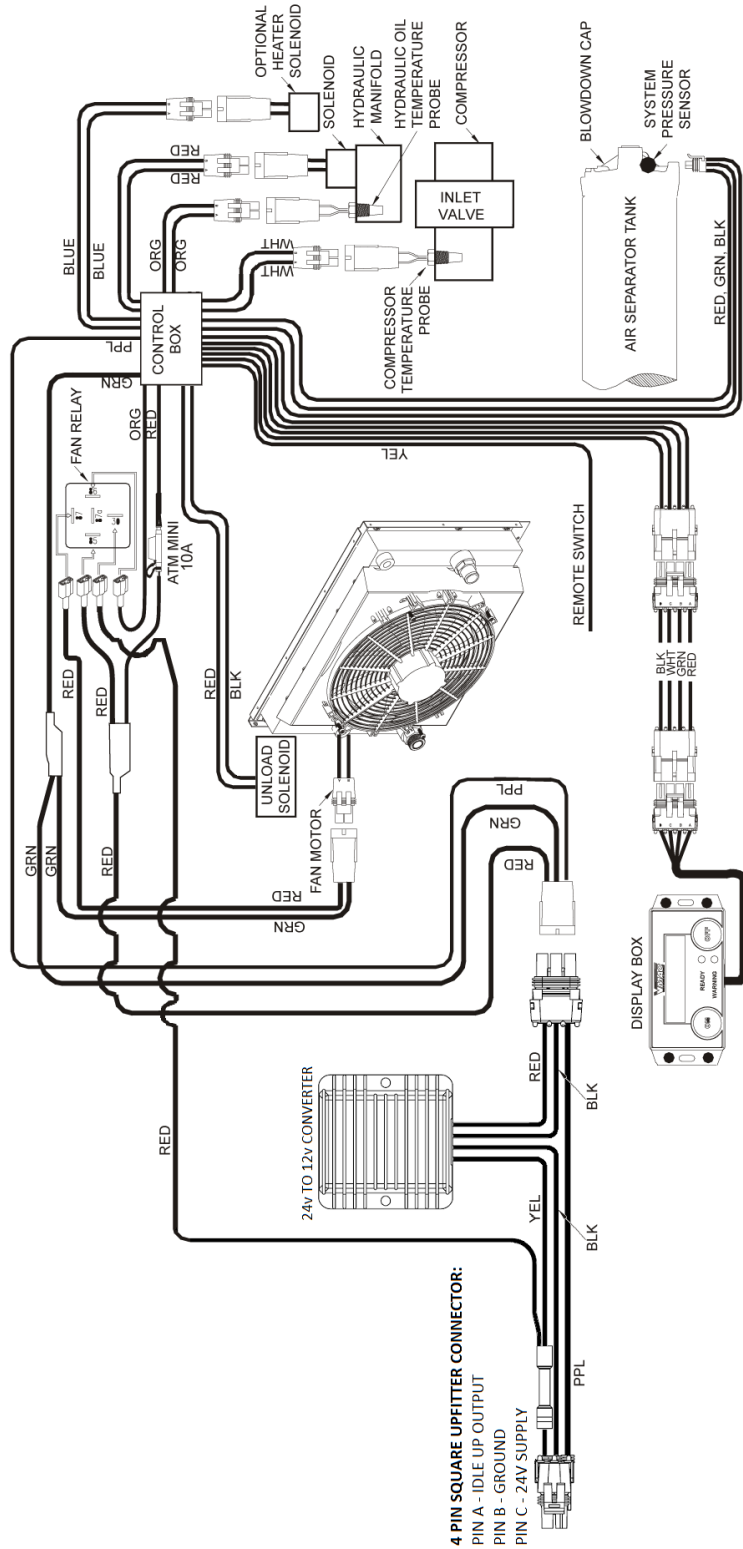


Figure 2 – Electrical schematic

Document: 1901102

Revision	Revision Details	Revised by	Checked by				Implemented	
			Mech.	Eng.	Elec.	Tech.		Qual.
A	Initial Release	MSP	JKR	N/A		GB	AWM	27 Sept 2018