

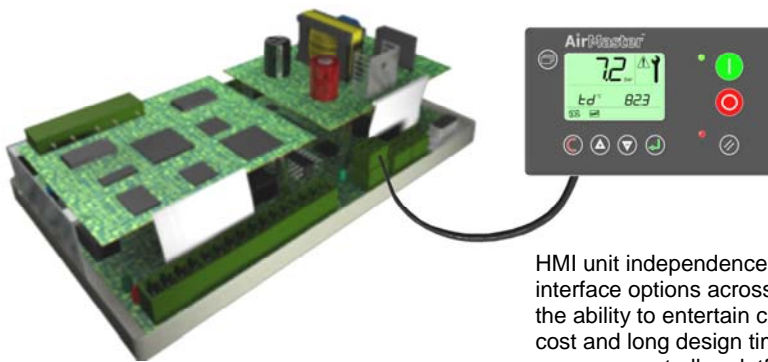
A06 – Airmaster R1

The Airmaster™ R1 has been custom designed and engineered as an advanced feature expandable and scalable modular control solution that will accommodate the requirements of the most demanding air compressor types inclusive; single or twin element rotary screw, oil free rotary screw, reciprocating, vane, variable speed and dynamic turbo.

Additional I/O expansion options enable single platform implementation across a wide range of applications facilitate end product differentiation and providing after sales value-add option capabilities.












An HMI (Human Machine Interface) unit can be connected to the R1 controller using a 4-wire cable; and be located up to 10 metres cable length from the R1. The remote from controller concept eliminates the need to route a large number of control wires from the starter/control panel area to the user interface location and facilitates HMI placement to suit the User, not the product.



HMI unit independence also facilitates differentiated user interface options across end product models or ranges with the ability to entertain custom build solutions without high cost and long design time implications utilising the R1 as a common controller platform.

The AirMaster™ R1 is fully compatible with, and complimented by, a range of CMC system solutions including efficiency control and analysis and local or remote supervisory products using a proven industrial RS485 network.

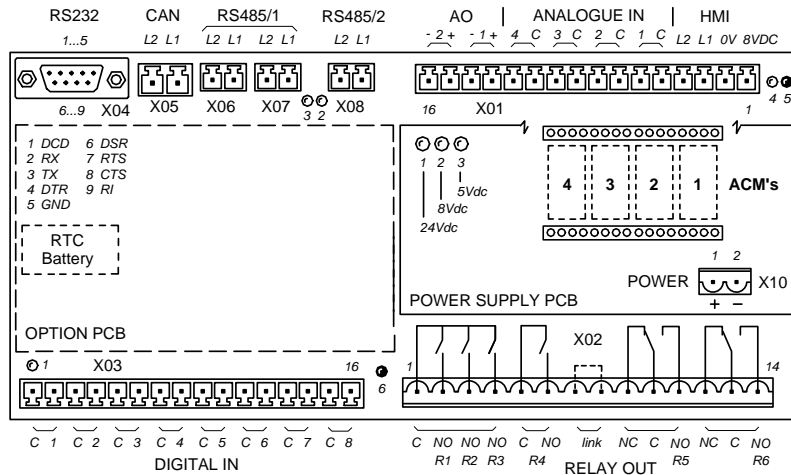
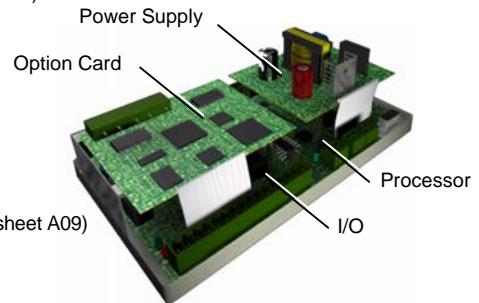
AirMaster™

-  World Market, Globally Deployable with Differentiation Options
-  Independently Mountable HMI Unit with Display Type Options
-  Custom and Configurable I/O with Expansion Options
-  VSD Ready with Optimum Speed Technology
-  Multiple VSD Systems Compliant
-  Integral Emergency Stop Output Isolation Compliant
-  Delivery and Internal Pressure Sensor Option with ΔP Monitoring
-  Management and Monitoring Systems Network Enabled
-  Real Time Clock with Pressure Schedule

SPECIFICATIONS

AirMaster™

Technical
 Processor 16bit ST ST10R272
 Flash EPROM / RAM 256 Kbytes / 256 Kbytes (512Kbytes option)
 I/O Processor AduC814BRU (8051 compatible)
 A to D Resolution 12bit (1/4096)
 RTC Real Time Clock (option)
 Construction steel casing, zinc anti-corrosion, IP20
 Mounting 35mm Rail, DIN 46277-3
 Dimensions 115mm x 166mm x 88mm
 Connections PCB mounted, Phoenix compatible
 Power Supply 24Vac +20%; 50VA @ 50/60Hz
 24VDC +-20%; 40W
 Option Card I/O Expansion (see 'Option Cards' fact sheet A09)
Conformity
 Temperature - Operating 0°C to +55°C (32°F to 130°F)
 IEC 68-2-1 A/2 B/3 Ca/14 Nb/30 Db
 Temperature - Storage -25°C to +75°C (-13°F to 167°F)
 IEC 68-2-1 A/2 B/14 Na
 Relative Humidity <95%RH non-condensing @ 40°C (104°F)
 Vibration IEC 68-2-6 Fc/27 Ea/29 Eb
 EMC IEC 801-2/3/4/5, EN61000-4-2/3/4/5; CISPR 22, EN55022 class A conducted/radiated



Digital Inputs Common : 24VDC output to remote volt free switching contact(s)
 Emergency Stop: 140mA, closed < 3ohms (integral output isolation)
 Digital Input 1 Switching: 10mA, closed < 3ohms, open > 750Kohms
 Digital Inputs 2 to 7 Switching or PTC: 1.4mA, closed < 750ohms, open > 4000ohms; IEC 34-11-2, VDE 0660
 Digital Input 8 Contacts : 250Vac, 8A (cosØ=1) / (5ADC)
Relay Outputs 4x analogue inputs, selectable using plug-in analogue conditioning modules (ACM's)
Analogue Inputs ACM's can be fitted to the R1 in any combination, dependant on application software (see 'Analogue Conditioning Modules' fact sheet A10)
Analogue Outputs 2x analogue output, 4 to 20mA @ 24VDC; 500ohm maximum load
Link X02-7&8, no connection to internal circuits; 250Vac, 8A (cosØ=1) / (5ADC)
Communications RS485 Port(1): CMC Multi485 systems protocol, 9600 baud
 RS485 Port(2): XPM485 protocol or application specific options
 RS232 Port: application specific options
 CAN Port: application specific options

Model Variants

R1	Memory Flash		Real Time Clock	Inputs		Outputs		Communications			
	256K	512K		8 x Digital	4 x Analogue	6 x Relay	2 x 4-20mA	RS485(1)	RS485(2)	RS232	CAN
R1 - 20	✓			✓	✓	✓	✓	✓	✓		
R1 - 25	✓		✓	✓	✓	✓	✓	✓	✓		
R1 - 30	✓			✓	✓	✓	✓	✓	✓	✓	
R1 - 35	✓		✓	✓	✓	✓	✓	✓	✓	✓	
R1 - 40		✓		✓	✓	✓	✓	✓	✓	✓	✓
R1 - 45		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

