

PRODUCT RELEASE



CKMTA12 / 24

ARB CKMTA12 / 24 MAXIMUM PERFORMANCE ON-BOARD AIR SUPPLY

Brief Description:

ARB's new CKMTA12 and CKMTA24 twin on-board compressor kits were designed to fill the market need for a compact sized yet high-volume compressed air source to suit the high volume airflow needs of most air powered tools, and also to suit the actuation and control needs of the ARB Air Locker, and the harsh and demanding environment of the ARB Air Locker user.



Features:

- Available in 12V (CKMTA12) or 24V (CKMTA24) models.
- Constructed primarily of light weight, high strength, engineering grade materials, including military and aerospace standard components.
- Pressure switch controlled air manifold system regulates pressure between 9.3Bar [135PSI] and 10.3Bar [150PSI] suited to air tools and all ARB Air Locker equipped vehicles.
- Highest air flow rate of any 12V compressor of its size on the market at 174LPM [6.16CFM].
- High efficiency design consumes only 56 Amps at maximum air flow.

ARB Air Compressors

- Built with sealed components for moisture and dust resistance.
- Hard-anodized cylinder bores and PTFE (Teflon) impregnated carbon fiber piston seals for reduced friction and maximum trouble free life.
- Ducted IP55 sealed brushless DC cooling fan and anodized motor mounting brackets effectively dissipate heat from the motors, heads and electronics allowing for a 100% duty cycle (under room temperature conditions).
- Anti-vibration / sound deadening is integrated into the mount.
- Relocatable splash resistant air filter assemblies for cleaner, cooler air supply and versatile waterproof air intake positioning.
- High density and high flow washable sintered bronze air filter elements.
- Full wiring loom included for simplified installation and easy plug-in connectivity to Air Locker control solenoids. (Note: Air Locker Manifold Kit #171503 required to mount solenoids)
- Equipped with dual heavy duty Maxi-Fuses for professional in-line circuit protection and true circuit redundancy in case of a fault.
- Motors are water sealed, 100% ball bearing equipped (i.e., no bushings used), and feature a unique linear brush pre-load system for extra long life, low heat and quiet operation throughout the life of the unit.
- Motors are internally thermal protected against extreme temperature damage.
- Compressor pistons are equipped with a heavy duty European made cylindrical roller bearing.
- Over-pressure safety valve equipped.
- Sealed illuminated automotive grade dash switch included.
- Fully serviceable and all replacement parts available.
- EMF suppressed for use in proximity to sensitive electronic equipment.
- CE and C-Tick compliant.
- Engineered, built, and individually dyno-tested in Australia from local and imported components.

Applications:

- Pneumatic supply and electrical control for ARB Air Locker(s). (Air Locker Manifold Kit #171503 required)
- Rapid inflation of small, medium and large tyres.
- Air tools rated up to 85LPM [3CFM] @ 6Bar [90PSI] continuous supply.
- Air tools rated higher than 85LPM [3CFM] @ 6Bar [90PSI] using an optional air tank suitable to the run time requirements.



Notes:

- All ARB CKx series compressors share a unified wiring loom from the switches to the 4 terminal junction and therefore this section of the loom does not need to be replaced if upgrading an existing CKx series compressor.
- A manifold kit (#171503) is recommended for Air Locker solenoid mounting with CKMTx compressors.

Kit Includes:

- Fully assembled and tested air compressor (12V or 24V).
- Complete wiring loom w/ Air Locker solenoid plug-in terminals.
- Automotive OEM quality compressor isolating switch.
- 2 x relocatable splash resistant air filters with washable high-flow sintered bronze filter cartridges.
- Mounting bolts and washers.
- Comprehensive photo illustrated installation guide.



Optional Accessories:

ARB offers a range of accessories to help maximize the potential of your on-board compressor installation.

JIC4 [AN-4] male to 1/4NPT male adapter nipple 170631 6m [20ft] high temperature inflation hose with m/f US std air 171301 couplings Pump-up kit for hard mounted tyre inflation 171302 - 6m inflation hose - straight high flow tyre inflator - 1/4NPT T-piece - recreational inflation accessories 171303 Recreational inflation accessory kit to suit US std air coupling - straight high flow tyre inflator - Schrader valve adapter for reseating tyre beads (also inflates larger sized air matress valves) - ball inflator - 2 x mattress inflators / blowers Compressed air blow gun to suit US std air coupling 171309 4 Liter [1 Gallon] forged aluminium air tank (JIC4 port x 2) 171501 Complete manifold kit to suit Air Locker solenoid mounting 171503 - 2 x 1/8BSPP ports - 2 x 1/4NPT ports - high temp PTFE stainless braided hose - 2 x 170631 adapter nipples 12V electric solenoid (1/8BSPP ports x 2) 180103 Inflation/deflation gauge (stainless braided, lock-on) ARB605 **ARB606** Tyre inflator wand (long reach, push-on) **ARB607** Tyre inflator chuck (angled, lock-on)

RBALLE TECHNICAL SPECIFICATIONS

| ARB AIR COMPRESSOR | OLTAGE | U | PERFORMANCE NDER NO LOAD | | PERFORMANCE UNDER LOAD | | | | | @ 22°C [72°F] e) | SIZE mm [inches] | | | CURRENT LOAD IN LOOM | SOLENOID MOUNTING | ITCH | POLYPROPYLENE CARRY | PED | YRE INFLATION HOSE | VER-LOAD PROTECTED |
|--------------------------------------|-------------|--------------|-----------------------------|----------------|---------------------------|-----------------|-----------------|------|---------|--|------------------------------|--|--------------------|-----------------------------------|----------------------------|---------------|-----------------------|---------------------|--------------------|-------------------------|
| RANGE MODEL NUMBER DESCRIPTION | SUPPLY VOLT | CURRENT DRAW | AIR I @ 0Bar | FLOW @ 0PSI | CURRENT DRAW | AIR I @ 2Bar | FLOW @ 29PSI | incl | essor & | DUTY CYCLE % @ (on time / off time) | -when µ in the -portab | bositioned ve mounting br le compresso as carry cas | acket. or sizes | AUTOMOTIVE CUI PROTECTION IN L | AIR LOCKER SOL MANIFOLD | PRESSURE CUTO | DURABLE POLYP CASE | air filter Equipped | 6 METER [20 FT] T | THERMAL OVER-I MOTOR |
| CKSA12 COMPACT ON-BOARE | 12 | 5A | 25.0LPM | 0.88CFM | 6.5A | 13.4LPM | 0.47CFM | 2.4 | 5.3 | 35% 21/39 | 122mm [4.8"] | 162mm [6.4"] | 88mm [3.5"] | x | \checkmark | \checkmark | × | \checkmark | × | × |
| CKMA12 HIGH VOL ON-BOARD | 12 | 13A | 75.1LPM | 2.65CFM | 22.9A | 61.6LPM | 2.18CFM | 4.5 | 9.9 | 50% 30/30 | 142mm [5.6"] | 190mm [7.5"] | 96mm [3.8"] | \checkmark | \checkmark | \checkmark | × | \checkmark | × | \checkmark |
| CKMA24 HIGH VOL ON-BOARD | 24 | | | | | | | 4.5 | 9.9 | 50% 30/30 | 142mm [5.6"] | 190mm [7.5"] | 96mm [3.8"] | \checkmark | \checkmark | \checkmark | × | \checkmark | × | \checkmark |
| CKMP12 HIGH VOL PORTABLE | 12 | 13A | 75.1LPM | 2.65CFM | 22.9A | 61.6LPM | 2.18CFM | 6.6 | 14.5 | 50% 30/30 | 208mm [8.2"] | 440mm [17.3"] | 238mm [9.4"] | \checkmark | × | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark |
| CKMTA12 MAX VOL ON-BOARD | 12 | 28A | 174.3LPM | 6.16CFM | 50A | 131.7LPM | 4.65CFM | 8.8 | 19.4 | 100% | 102mm [4.0"] | 190mm [7.5"] | 275mm [10.8"] | \checkmark | x ₁ | \checkmark | × | \checkmark | X | \checkmark |
| CKMTA24 MAX VOL ON-BOARD | 24 | | 174.3LPM | 6.16CFM | | 131.7LPM | 4.65CFM | 8.8 | 19.4 | 100% | 102mm [4.0"] | 190mm [7.5"] | 275mm [10.8"] | \checkmark | x ₁ | \checkmark | × | \checkmark | × | \checkmark |
| CKMTP12* MAX VOL PORTABLE | 12 | 28A | 174.3LPM | 6.16CFM | 50A | 131.7LPM | 4.65CFM | | | 100% | 190mm [7.5"] | 480mm [18.9"] | 340mm [13.4"] | \checkmark | × | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark |

1 requires optional manifold kit #171503

-All ARB Air Compressors are individually leak tested, pressure tested, current draw tested and flow tested under load at the factory before packaging.

-ARB Air Compressor pressure switches are specially designed to suit the working pressure range of an

ARB Air Locker air operated locking differential.

-All specifications here are average nominal values recorded during factory testing, and these values may vary as materials technology and component design undergoes continuous improvement.

