

A-SERIES THERMO® EXPANSION VALVE

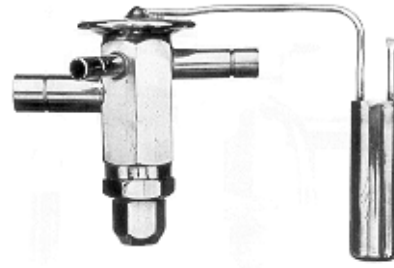
“A” Series Thermo Expansion Valves are used for heat pump, air conditioning, food service and commercial applications. “A” Series valves provide stable and accurate control over a wide range of operating conditions.

FEATURES

- ☆ Hermetic construction eliminates external leakage
- ☆ Compact size allows installation in limited spaces
- ☆ Mass spectrometer tested to ensure less than 0.10 oz/year external leakage rate
- ☆ Stainless steel power element eliminates corrosion and prevents valve failure

OPTIONS

- ☆ HAA wide range charge allows two valves (2 1/2 and 5 ton, R-22) to cover all capacities from 1 to 5 tons on most residential systems
- ☆ New ZW195 charge available for R-410A systems
- ☆ Available adjustable or non-adjustable superheat for application flexibility
- ☆ SAE or ODF connections standard – chatleff or aeroquip are available
- ☆ Available external or internal equalizer to satisfy the broadest possible range of applications
- ☆ Available internal check valve allows reverse flow heat pump applications, eliminating the need for external piping and external check valve, thus reducing installation costs (ANC Series)
- ☆ Bleed type pressure equalization available to accommodate PSC type compressors
- ☆ Pressure limiting charges (MOP) available – consult factory



SPECIFICATIONS

Maximum working pressure: 700 psig
UL Recognized: SA 5312

Extended Capacity Tables begin on page 36.
Ordering Information begins on page 3.

NOMENCLATURE EXAMPLE: AACEB 2 HC 30 IN 3/8 x 1/2 ODF ANG

| A | A | C | E | B | 2 | H | C | 30 IN | 3/8 x 1/2 | ODF | ANG |
|---|---|---|--|---|---|---|--|--|---|---|--|
| Valve Series Economy, Hermetic Design | Superheat Adjustment A = Adjustable N = Non-Adjustable | Internal Check Valve (optional) Reverse Flow Bypass Application | Equalizer E = External (Omit for Internal) | Bleed Hole (optional) Omit for no bleed hole | Capacity Nominal Rating in Tons See nominal capacity table below | Refrigerant Code F = R12 H = R22 M = R134a N = R407C P = R507 R = R502 S = R404A Z = R410A | Charge Code C = medium temp CA = heat pump W(MOP) = press. limiting Z = low temp AA = wide range | Capillary Tube Length 30 IN (std) other lengths are available | Inlet x Outlet Connection Sizes I 0 1/4 3/8 3/8 1/2 1/2 5/8 5/8 7/8 | Connection Type SAE = flare ODF = solder Chatleff (optional) Aeroquip (optional) | Config-uration S/T = straight- thru ANG = 90° angle |

AA/AN SERIES – NOMINAL CAPACITY TABLE IN TONS

| R12 | R134a | R22 | R410A | R502 | R507/R404A | R407C |
|-------|-------|-------|-------|-------|------------|-------|
| – | 1/8 | 1/5 | – | – | 1/8 | 1/5 |
| 1/8 | 1/4 | 1/4 | 1/4 | 1/8 | 1/4 | 1/4 |
| 1/4 | 1/2 | 1/2 | 1/2 | 1/4 | 1/2 | 1/2 |
| 1/2 | 3/4 | 1 | 1 | 1/2 | 3/4 | 1 |
| 1 | 1 | 1 1/2 | 1 1/2 | 1 | 1 | 1 1/4 |
| – | 1 1/2 | 2 | 2 | – | 1 1/4 | 2 |
| 1 1/2 | 2 | 2 1/2 | 3 | 1 1/2 | 2 | 2 1/2 |
| 2 | 2 1/2 | 3 | 4 | 2 | 2 1/4 | 3 1/4 |
| 2 1/2 | 3 | 4 | 5 | 2 1/2 | 2 1/2 | 4 |
| 3 | 4 | 5 | – | 3 | 3 1/2 | 5 1/4 |

ORDERING INFORMATION FOR A-SERIES VALVES

| VALVE SERIES | CAPACITY TONS | CONNECTIONS | CAP TUBE | PCN BY CHARGE | | | | | | | | | | |
|-------------------|---------------|-----------------------|-------------------|--------------------------------------|--|---------------------------------------|--------------------------------------|----------------------------------|---------------------------------------|--|---------------------------------------|-----------------------------------|---|--------|
| | | | | FC <small>R-12 Med. Temp.</small> | MC <small>R-134a Med. Temp.</small> | MZ <small>R-134a Low Temp.</small> | HC <small>R-22 Med. Temp.</small> | HW100 <small>R-22 MOP</small> | HAA <small>R-22 Wide Range</small> | SC <small>R-404A Med. Temp.</small> | SZ <small>R-404A Low Temp.</small> | SW45 <small>R-404A MOP</small> | ZW195 <small>R-410A Wide Range</small> | |
| AA | 1/4 | 1/4 X 1/2 ODF S/T | 30 IN. | | | | | | | | 063503 | | | |
| | | 1/4 X 3/8 ODF S/T | | | | | | | | | | 065202 | | |
| | | 1/4 X 1/2 ODF S/T | 5 FT. | 064302 | 065623 | | 055932 | | | | | | | |
| | | 1/4 X 3/8 ODF S/T | | 048986 | | | 056315 | | | | 065675 | 065676 | | |
| | | 1/4 X 3/8-1/2 SAE S/T | | 049820 | | | | | | | | | | |
| | 1/2 | 1/4 X 1/2 ODF S/T | 30 IN. | 062797 | 065624 | | 065626 | | | | 063504 | | 065682 | 065685 |
| | | 1/4 X 3/8 SAE S/T | | | | | 058986 | | | | | | | |
| | | 3/8 X 1/2 ODF S/T | | | | | | | | | 063925 | | | |
| | 3/4 | 3/8 X 1/2 ODF S/T | | | | | | | | | 065149 | 065686 | | |
| | AAE | 1/2 | 1/4 X 1/2 ODF S/T | 5 FT. | 065628 | 065630 | | 065632 | | | | | | 065636 |
| 3/8 X 1/2 ODF S/T | | | | | | | 065633 | | | | 065687 | 065688 | | |
| 1 | | 1/4 X 1/2 ODF S/T | | | | | 065634 | | | | | | | |
| | | 3/8 X 1/2 ODF S/T | 062798 | | 065631 | | 065635 | | | | 065183 | 065637 | | |
| 1-1/2 | | 3/8 X 1/2 ODF S/T | | | | | 064424 | | | | 065697 | 065698 | | |
| 2 | | 3/8 X 1/2 ODF S/T | 30 IN. | | | | | 064425 | | | | 065689 | 065690 | |
| | | | | | | | | | 065330 | 059815 | | | | |
| 2-1/2 | | 1/2 X 5/8 ODF S/T | 5 FT. | | | | | | | | 065691 | 065148 | | |
| | | 3/8 X 1/2 ODF S/T | 30 IN. | | | | | | 063648 | | | | | |
| | | CHATLEFF | | | | | | 013938 | | | | | | |
| 3 | | 3/8 X 1/2 ODF S/T | 5 FT. | | | | 062376 | | | | 065692 | 065693 | | |
| | | | 30 IN. | | | | | | | | | | 065579 | |
| | | | | 3/8 X 3/8 ODF S/T | | | | | | | | | 064595 | |
| 5 | | 3/8 X 5/8 ODF S/T | 5 FT. | | | | | 062088 | | | | | | |
| | | 3/8 X 3/8 ODF S/T | 30 IN. | | | | | | | | | | | |
| | | 1/2 X 5/8 ODF S/T | | | | | | | | | | 065580 | | |
| | | 3/8 X 1/2 ODF S/T | | | | | | | | 063649 | | | | |
| | | CHATLEFF | | | | | | | 013939 | | | 015794 | | |

Standard Product Offering
* Product Code Number
S/T = Straight Through

ORDERING INFORMATION FOR A-SERIES VALVES

| VALVE SERIES | CAPACITY TONS | CONNECTIONS | PCN* CHARGE | | | CAP TUBE |
|--------------|---------------|-------------------|---------------------------|--------------------|------------------|----------|
| | | | FC R12/R134a Min. Tot. | HCA R22 Hbr Rmp | HW100 R22 MCP | |
| ANEB | 2 | 3/8 x 1/2 ODF ANG | | 007506 | | 30 IN. |
| | 2 1/2 | 3/8 x 1/2 ODF ANG | | 007507 | | 30 IN. |

UNIVERSAL REPLACEMENT HAA AND ZW195 WIDE RANGE CHARGE FOR HVAC APPLICATIONS

- ☆ The AACE wide range valve allows several TXV to replace the majority of residential air conditioning and heat pump applications.
- ☆ Special high stability charges designed for HVAC applications and used by leading original equipment manufacturers.
- ☆ These wide range charges provide greater superheat stability, allowing in most cases two valves to cover a wide range of capacities from 1 to 5 tons.
- ☆ Offers customers the benefit of inventory reduction by replacing several valves with two valves, while continuing to meet system performance needs.
- ☆ With the addition of an integral check valve, four expansion valves can meet the majority of residential HVAC, light commercial, and heat pump applications as shown in Table 1.

TABLE 1

| PCN | DESCRIPTION | R-22 CAPACITY RANGE |
|--------|--|---------------------|
| 064102 | AACE 2 1/2 HAA ODF EE 30" 3/8 x 1/2 ODF S/T 6A | 1 TO 3 TONS |
| 064103 | AACE 5 HAA ODF EE 30" 3/8 x 1/2 ODF S/T 6A | 3 1/2 TO 5 TONS |
| 014091 | AACE 2 1/2 HAA CAP TUBE EE w/NUT 30" CHATLEFF X CHATLEFF S/T 6A | 1 TO 3 TONS |
| 014092 | AACE 5 HAA CAP TUBE EE w/NUT 30" CHATLEFF X CHATLEFF S/T 6A | 3 1/2 TO 5 TONS |
| 065581 | AACE 3 ZW195 3/8 x 1/2 ODF S/T 6A | 1 1/2 TO 3 TONS |
| 065582 | AACE 5 ZW195 1/2 x 5/8 ODF S/T 6A | 3 1/2 TO 5 TONS |
| 015795 | AACE 3 ZW195 CHATLEFF 30" CHATLEFF X CHATLEFF S/T 6A | 1 TO 3 TONS |
| 015796 | AACE 5 ZW195 CHATLEFF 30" CHATLEFF X CHATLEFF S/T 6A | 3 1/2 TO 5 TONS |

SUPERHEAT SCREW REPLACEMENT KIT 20297

AACE DIMENSIONAL DATA

