



VALVES & REGULATORS

Emerson TIR Series

BRAND
Emerson

SKU
RC_PROD_020

CATEGORY
Valves & Regulators



OVERVIEW

The Emerson TIR is the mid frame of the T-Series large-capacity, balanced-port, take-apart expansion valve family — the step between the TER (22–45 tons R-22) and the THR (55–85 tons). The TIR cage kit delivers a nominal 55 tons on R-22 (35 tons R-12, 45 tons R-134a, 37 tons R-404A/R-507), sharing the same take-apart architecture: interchangeable cage, body flange, and power assembly, each field-replaceable without removing the valve body from the line. Like all R-frame T-Series valves, the TIR is balanced-port and externally equalized as standard, with external superheat adjustment and bi-directional capability. For plants running mixed T-Series frames, power assemblies (XC-726 series) are shared across TER/TIR/THR/TMR — one spare head covers the whole large-capacity installed base.

KEY FEATURES

Take-apart construction
in-line service by component swap

Balanced port design
for stable superheat control under varying pressure drops

Externally equalized standard
external superheat adjustment

Bi-directional
capability

SPECIFICATIONS

PARAMETER	VALUE
MAX. WORKING PRESSURE	450 psig (31 bar)
TORQUE BOLTS	300 in-lbs
NOMINAL CAPACITY	R-22 / R-407C: 55 tons · R-134a: 45 tons · R-404A/R-507: 37 tons · R-12: 35 tons