



## VALVES &amp; REGULATORS

## Danfoss KVL Series

BRAND

Danfoss

SKU

RC\_PROD\_007

CATEGORY

Valves &amp; Regulators



## OVERVIEW

The Danfoss KVL is a crankcase pressure regulator fitted in the suction line immediately ahead of the compressor. It opens on pressure fall on its outlet side — i.e., when suction pressure ahead of the compressor drops below the set value — throttling flow to protect the compressor motor from overload at high suction pressures, such as after start-up, hot gas defrost, or long standstill periods. The KVL regulates on outlet pressure only: pressure variations on the inlet side do not affect the degree of opening, because the valve carries an equalization bellows with an effective area matching the valve seat. An integrated damping device protects against the pulsations that normally occur in suction lines near the compressor, ensuring long service life without impairing regulation accuracy.

## KEY FEATURES

Compressor motor protection  
against overload at high suction pressure

Outlet (compressor-side) pressure regulation  
inlet variations have no effect

Equalization bellows design  
for accurate, stable regulation

Effective pulsation damping  
for long life close to the compressor

## SPECIFICATIONS

| PARAMETER                      | VALUE                                                                                               |
|--------------------------------|-----------------------------------------------------------------------------------------------------|
| FUNCTION                       | Crankcase (suction) pressure limiting — opens on falling outlet pressure                            |
| SIZING BASIS                   | e.g., KVL 12/15/22 deliver ~0.9 TR evaporator capacity at 30 psig max. suction and 4 psi $\Delta p$ |
| REFRIGERANT CORRECTION FACTORS | Published for R22, R134a, R404A/R507, R407C at liquid temperatures 50–120 °F                        |