04 HEAVY DUTY

Injection for motor cooling:

- Managed from the Motor Cooling System module
- Very short duration
- Only the quantity necessary for motor Kriwan Diagnose available for the cooling is injected
- High efficiency

- the compressor electrical board
- TA module fully cabled in the compressor electrical board
- compressor diagnostics

 Motor Cooling System fully cabled in Liquid injection positioned on the second stage head

Oil pump pressure check:

- With Delta-P[®] II for system with Δ P check from PLC
- With INT250FR for system without PLC or without ΔP direct check



- Liquid injection perfectly calibrated in quantity and durability due to the positioning of the bulb on the second stage
- Maximization of COP

CLUSIVE

Π

SCO

- Instantaneous mixing of the first stage gas with liquid injection
- High accuracy of the suction temperature in the second
- Gas doesn't pass from motor so it's not overheated obtaining the performance maximization
- Improvement of the system's
- Thanks to the Motor Cooling System only a defined liquid quantity cools the motor
- WITHOUT EXTERNAL PIPEWORK thanks to design of specific internal passages and new heads
- Eliminated the thermal dissipation of the external pipework insulation
- Eliminated the refrigerant leakage risk from the collector welding
- Finely balanced components and construction ensure quiet and smooth operation
- New components studied for pulsations reduction
- Development and production Made in Italy
- 100% tested
- · Manufactured with high quality components
- · Oil sump also dimensioned for marine applications

 Motor protection with Motor Cooling System module and AMS sensors (linear temperature sensor)

Avoids ice formation on the

- No condensation in the

electrical box avoiding short

- Avoided the liquid slugging

motor side:

- No oxidation

circuit risk

MOTOR COOLING SYSTEM

- It controls the motor temperature through AMS sensors during the critical starting phase!
- Detection threshold PRE-ALARM temperature: the module activates the liquid injection in the motor with correct quantity and duration optimising the maximum COP
- Detection threshold CRITICAL TEMPERATURE: the module stops the compressor preventing the burn
- Stopping of injection in case of liquid absence in the system
- TA module included to stop the injection when the compressor is switched off Possibility to manage the function directly from the control panel

AVAILABLE IN 3 VERSIONS

		MOTOR COOLING SYSTEM	KRIWAN DIAGNOSE	Delta-P [®] II	INT 250 FR	MAKE YOUR CHOICE
	STANDARD CONTROL	\checkmark		\checkmark		Adapt for SYSTEM with ΔP survey from PLC a dedicated signal connects the Delta-P $^{\circ}$ II to PLC allowing instant identification of the stop cause
	DIAGNOSTIC CONTROL	\checkmark	\checkmark	\checkmark		Adapt for SYSTEM with ΔP survey from PLC a dedicated signal connects the Delta-P $^{\circ}$ II to PLC allowing instant identification of the stop cause Compressor Diagnostic analysis included.
	DIRECT CONTROL	✓	✓		\checkmark	Adapt for SYSTEM without PLC or without ΔP direct survey INT250FR, easily connected to the electrical box, allows the ΔP control through the Kriwan Diagnose module.

EACH VERSION AVAILABLE WITH SUBCOOLER

EXCLUSIVE

FRASCOLD



Headquarters and production

FRASCOLD SpA

Via B. Melzi 105 - 20027 Rescaldina (MI) Italy Tel. +39 0331 742201 - Fax +39 0331 576102 frascold@frascold.it - www.frascold.it





Corporate offices

FRASCOLD SHANGHAI frascold.china@frascold.net www.frascold.it

FRASCOLD USA kristian@frascoldusa.com www.frascoldusa.com



NEW SEMIHERMETIC DOUBLE-STAGE COMPRESSORS



COMPACT EFFICIENT
WITH INNOVATIONS UNIQUE ON THE MARKET

Up to 15% increase of system's COP

MOTOR COOLING SYSTEM

Optimized Liquid injection