### CHILLER MODEL IPE31 "Smart" 400/3/50 R407c

#### **GENERAL DESCRIPTION**

The chiller model IPE31 is a compact air cooled unit designed for the fluid cooling of the industrial processes.

The unit is supplied complete of refrigerant gas charge and for the installation it's necessary water and electrical connections only.



#### **TECHNICAL SPECIFICATIONS**

## Metal works

- Frame in galvanized sheet, stove-enameled with polyurethane powders
- Bearing foots for fixed installation
- Frame is made in anodized aluminium profiles
- Panels in galvanized steel, stove-enameled with polyurethane powders
- Stainless steel fixing screws
- **Drip tray** for rain water collection in case of outside installation, complete with type discharge fitting connectable without disassembling any panel
- R407c refrigerant gas charge and compressor's oil charge
- High efficiency hermetic SCROLL compressor
- Condensing coil Cu/Al protected by accidental crash
- Axial fan with blades haul profile and bearings free from servicing
- On/Off automatic condensing pressure control with pressure switch
- Refrigerant filter with mechanical and dehydrating action
- Liquid sight-glass with colour-change indicator for checking gas charge and humidity
- "NO FROST" evaporator internally assembled into steel storage water tank externally insulated
- High pressure switch
- Low pressure switch

# Hydraulic circuit

Refrigerant circuit

- Big storage water tank externally insulated
- Centrifugal high pressure water pump
- Water pressure gauge for the quick displaying of the outlet water pressure
- Differential pressure switch
- Open expansion tank for manual solution filling.
- Automatically over-pressure by-pass.
- Water discharge valve of quick open type, placed outside, for handling without moving any panel

### Electrical cabinet

#### Electrical cabinet produced and wired as per applicable IEC-EN norms, complete with:

- Main switch and door-lock
- Compressor motor contactor
- Pump motor contactor
- Auxiliary transformer

# Microprocessor control

#### Microprocessor control complete with:

- Digital user interface
- Water automatic temperature control with on/off compressor switching
- Anti-freeze protection with sensor dedicated
- Compressor's hour counter
- Alarms management by code
- Digital input for remote control (remote ON/OFF)
- General alarm free contact and auto-diagnostic function









CHILLER MODEL	IPE 31 "S	Smart" 40	00/3/50	R407c	
TECHNICAL DAT	Ά				
Cooling capacity <sup>(1)</sup>			kW	15	
			Kcal/h	12.900	
Cooling capacity at your conditions:			kW	6,6	
T. IN-OUT Unfreeze solution 20%	0 / -5°C	Ambiante Air T.	+30°C	Kcal/h	5.680
Max total Power	installed			kW	6
Compressor					
Number of compre	essors			n	1
Type of compress	ors			-	SCROLL
Number of refrige	rant gas circ	uits		n	1
Refrigerant type			-	R407c	
Air condensing s	side				
Number of fans			n	1	
Total air flow rate			m³/h	5.040	
Motor power input			kW	0,32	
Storage water ta	nk				
Capacity			lt	65	
Water pump					
Nominal water flow rate [Pn] (1)			m <sup>3</sup> /h	32,6	
Pressure @ Pn			bar	3,1	
Motor power input			kW	0,6	
Sound power level (2)			dB(A)	77	
Shipping weight			Kg	280	
Operating weight			Kg	350	

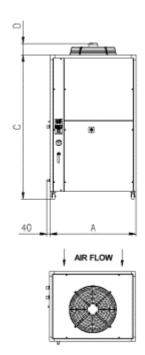
Capacities referred to:

(1) Chilled water temperature IN/OUT 20°C/15°C – Air temperature on condenser 25°C (2) Average nominal sound power level LW [dB(A) ref. 1 picowatt] – Imprecision on ponderate level (A): ISO 2204 grade 3 survey.

#### **DIMENSIONAL DRAWING**

Length (A)		980		
Width (B)	mm	800		
Height (C + D)		1.785		







### CHILLER MODEL IPE 51 "Smart" 400/3/50 R407c

#### **GENERAL DESCRIPTION**

The chiller model IPE51 is a compact air cooled unit designed for the fluid cooling of the industrial processes.

The unit is supplied complete of refrigerant gas charge and for the installation it's necessary water and electrical connections only.



#### **TECHNICAL SPECIFICATIONS**

## Metal works

- Frame in galvanized sheet, stove-enameled with polyurethane powders
- Bearing foots for fixed installation
- Frame is made in anodized aluminium profiles
- Panels in galvanized steel, stove-enameled with polyurethane powders
- Stainless steel fixing screws
- **Drip tray** for rain water collection in case of outside installation, complete with type discharge fitting connectable without disassembling any panel
- R407c refrigerant gas charge and compressor's oil charge
- High efficiency hermetic SCROLL compressor
- Condensing coil Cu/Al protected by accidental crash
- Axial fan with blades haul profile and bearings free from servicing
- On/Off automatic condensing pressure control with pressure switch
- Refrigerant filter with mechanical and dehydrating action
- **Liquid sight-glass** with colour-change indicator for checking gas charge and humidity
- "NO FROST" evaporator internally assembled into steel storage water tank externally insulated
- High pressure switch
- Low pressure switch

# Aydraulic circuit

Refrigerant circuit

- Big storage water tank externally insulated
- Centrifugal high pressure water pump
- Water pressure gauge for the quick displaying of the outlet water pressure
- Differential pressure switch
- Open expansion tank for manual solution filling.
- Automatically over-pressure by-pass.
- Water discharge valve of quick open type, placed outside, for handling without moving any panel

### lectrical abinet

#### Electrical cabinet produced and wired as per applicable IEC-EN norms, complete with:

- Main switch and door-lock
- Compressor motor contactor
- Pump motor contactor
- Auxiliary transformer

# Microprocessor control

#### Microprocessor control complete with:

- Digital user interface
- Water automatic temperature control with on/off compressor switching
- Anti-freeze protection with sensor dedicated
- Compressor's hour counter
- Alarms management by code
- Digital input for remote control (remote ON/OFF)
- General alarm free contact and auto-diagnostic function









CHILLER MODE	<b>L</b> IPE 51 "S	Smart" 40	00/3/50	R407c	
TECHNICAL DA	TA				
Cooling consoits (1)			kW	21,5	
Cooling capacity <sup>(1)</sup>			Kcal/h	18.490	
Cooling capacity at your conditions:			kW	9,47	
T. IN-OUT Unfreeze solution 20%	0 / -5°C	Ambiante Air T.	+30°C	Kcal/h	8.150
Max total Power	installed			kW	8,6
Compressor					
Number of compr	essors			n	1
Type of compress	sors			-	SCROLL
Number of refrigerant gas circuits			n	1	
Refrigerant type			-	R407c	
Air condensing side					
Number of fans			n	1	
Total air flow rate			m³/h	5.400	
Motor power input			kW	0,42	
Storage water ta	ınk				
Capacity			lt	65	
Water pump					
Nominal water flow rate [Pn] (1)			m <sup>3</sup> /h	3,7	
Pressure @ Pn			bar	2,7	
Motor power input			kW	0,6	
Sound power level (2)			dB(A)	77	
Shipping weight			Kg	300	
Operating weight			Kg	370	

Capacities referred to:

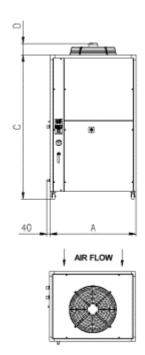
(1) Chilled water temperature IN/OUT 20°C/15°C – Air temperature on condenser 25°C (2) Average nominal sound power level LW [dB(A) ref. 1 picowatt] – Imprecision on

ponderate level (A): ISO 2204 grade 3 survey.

#### **DIMENSIONAL DRAWING**

Length (A)		980		
Width (B)	mm	800		
Height (C + D)		1.785		







### CHILLER MODEL IPE101 "Smart" 400/3/50 R407c

#### **GENERAL DESCRIPTION**

The chiller model IPE101 is a compact air cooled unit designed for the fluid cooling of the industrial processes.

The unit is supplied complete of refrigerant gas charge and for the installation it's necessary water and electrical connections only.



#### **TECHNICAL SPECIFICATIONS**

## Metal works

- Frame in galvanized sheet, stove-enameled with polyurethane powders
- Bearing foots for fixed installation
- Frame is made in anodized aluminium profiles
- Panels in galvanized steel, stove-enameled with polyurethane powders
- Stainless steel fixing screws
- **Drip tray** for rain water collection in case of outside installation, complete with type discharge fitting connectable without disassembling any panel
- R407c refrigerant gas charge and compressor's oil charge
- High efficiency hermetic SCROLL compressor
- Condensing coil Cu/Al protected by accidental crash
- Axial fan with blades haul profile and bearings free from servicing
- On/Off automatic condensing pressure control with pressure switch
- Refrigerant filter with mechanical and dehydrating action
- Liquid sight-glass with colour-change indicator for checking gas charge and humidity
- "NO FROST" evaporator internally assembled into steel storage water tank externally insulated
- High pressure switch
- Low pressure switch

# Hydraulic circuit

Refrigerant circuit

- Big storage water tank externally insulated
- Centrifugal high pressure water pump
- Water pressure gauge for the quick displaying of the outlet water pressure
- Differential pressure switch
- Open expansion tank for manual solution filling.
- Automatically over-pressure by-pass.
- Water discharge valve of quick open type, placed outside, for handling without moving any panel

### :lectrical cabinet

#### Electrical cabinet produced and wired as per applicable IEC-EN norms, complete with:

- Main switch and door-lock
- Compressor motor contactor
- Pump motor contactor
- Auxiliary transformer

# Microprocessor control

#### Microprocessor control complete with:

- Digital user interface
- Water automatic temperature control with on/off compressor switching
- Anti-freeze protection with sensor dedicated
- Compressor's hour counter
- Alarms management by code
- Digital input for remote control (remote ON/OFF)
- General alarm free contact and auto-diagnostic function









CHILLER MODEL IPE101 "Sn	art" 400/3/50	R407c	
TECHNICAL DATA			
Cooling capacity <sup>(1)</sup>		kW	30,8
		Kcal/h	26.490
Cooling capacity at your conditions:			13,5
Water IN/OUT t. / °C	°C	Kcal/h	11.600
Power input (1)		kW	6,6
Compressor			
Number of compressors		n	1
Type of compressors			SCROLL
Number of refrigerant gas circuits		n	1
Refrigerant type			R407c
Air condensing side			
Number of fans			1
Total air flow rate			9.360
Motor power input			0,69
Storage water tank			
Capacity			160
Water pump		m <sup>3</sup> /h	
Nominal water flow rate [Pn] (1)			5,2
Pressure @ Pn			2,9
Motor power input	kW	1,5	
Sound power level (2)	dB(A)	81	
Shipping weight	Kg	550	
Operating weight	Kg	710	

Capacities referred to:

(1) Chilled water temperature IN/OUT 20°C/15°C – Air temperature on condenser 25°C (25°C) Average nominal sound power level LW [dB(A) ref. 1 picowatt] – Imprecision on ponderate level (A): ISO 2204 grade 3 survey.

#### **DIMENSIONAL DRAWING**

Length (A)	mm	1.280		
Width (B)		990		
Height (C + D)		2.055		

