

Constant Cold throughout the day



## Intensive urban deliveries, demanding needs

PULSOR RANGE: Constant Cold throughout the day



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#### Maintaining constant

**cold** throughout your intense delivery schedule is an everyday challenge. When choosing a refrigeration unit, you need to be confident it will help you deliver goods to customers in a perfect state, everytime.

#### High capacity need...

Frequent stops, multiple door openings, traffic congestion, multi-temperature goods and sensitive products – it's hard to maintain the cold chain. To keep the temperature just right, your refrigeration unit needs to provide quick pull-down and high capacity at all times.

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#### ...even at idle speed

Conventional refrigeration units depend on engine speed and reach optimum capacity at 2400 RPM. But during city deliveries, your van is operating 90% of the time at low speed (under 2400 RPM)\*. This compromises refrigeration capacity and makes it even harder to maintain the right temperature for your goods.

\* In a standard urban delivery cycle





#### 100% cooling capacity at low engine speed

Pulsor's unique technology gives you constant optimum capacity throughout your entire delivery cycle.

#### Low Cost of Ownership

### 20% reduction in fuel consumption during pull-down

Designed with the E-Drive technology, Pulsor achieves high levels of reliability thanks to fewer moving parts and fittings. Optimum fleet availability together with reduced maintenance and fuel consumption during pull-down phase maintain a low cost of ownership.

#### Ensuring Sustainability

#### 75% improvement in containment

With a significant reduction in hoses and fittings, CO<sub>2</sub> emissions from refrigerant leaks have been reduced to protect the environment.

**Our answer:** The revolutionary Pulsor range. Benefiting from the E-Drive technology associated with an inverter and hermetic variable compressor, Pulsor ensures constant cold throughout the day.



# Unequalled Technology

Behind our new Pulsor range is groundbreaking E-Drive technology.

Removing the mechanical transmissions found in belt-driven systems, E-Drive transforms engine power into electricity.

This unique and patented solution is now available for the first time in vans.

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### A technological breakthrough you can rely on

Pulsor benefits from the latest technological innovations, combining Carrier E-Drive technology with an inverter and variable speed hermetic compressor.

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#### 3 steps for constant capacity



Smooth and efficient, Pulsor delivers 100% of its refrigeration capacity at low engine speed to guarantee constant cold throughout the day.

#### **Reliability means maximum uptime**

Innovative E-Drive

Benefiting from a long experience on trailers, E-Drive improves reliability by tackling the usual sources of breakdown with less moving parts plus a 85% reduction in fittings and hose length for reduced cost of ownership.

#### Efficient inverter

The inverter has already shown a long and successful experience in the air conditioning industry.

Unique compressor Pulsor micro logic ensures the compressor always works within its envelope for lower risk of breakdown and reduced maintenance costs.



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### Strong Cold Chain features with less environmental impact

With an impressively quick pull-down time and precise temperature control, Pulsor is the perfect fit for customers operating in city centers with multiple door-openings, sensitive products and multi-temperature deliveries.



The E-Drive technology enables a significant reduction in fittings and hose length, drastically reducing refrigerant leaks. Pre-loaded in refrigerant from the factory, a hermetic compressor also improves refrigerant containment. With an average of 2.5% of refrigerant leak per year, Pulsor reduces CO<sub>2</sub> emissions by 75% per year.

The Pulsor range carries the « Sustainable

This label is exclusively for products that

reduce environmental impact.

Solutions » mark, offered globally by Carrier.

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### User friendly interface with flexibility

#### Efficient driver's operation

Easy to operate and read, the cab command installed in the driver's cab will give the driver visibility on:

- Box temperature
- Temperature changes
- Message codes

The driver can easily set:

- Display brightness
- Set point temperature
- Defrost interval
- Unit function accordingly with the load transported



#### **Optimized unit management**

Designed with a new micro and logic, Pulsor will provide you with innovative functionalities to help you get the best out of your refrigeration unit:

- Programmable timer to start the unit in standby mode before the driver's arrival
- Automatic maintenance message
- Door switch (single & MT)\*
- Evaporator harness extension for remote evaporator (single & MT)\*
- Roof cut kit / Roof top kit\*
- Adjustment of the temperature parameters up to 0.3°C from the set point
- Water drain heater (single T°C)\*
- Independent temperature control with the DataCOLD temperature recorder range\*
- Real time cold chain monitoring with COLDTrans\*
- \* Optional feature



#### **Multi-temperature flexibility**

With E-Drive electrical power, Pulsor offers improved heating capacity that is independent of refrigeration capacity. Quick defrost boosts efficiency.

All types of configurations combining heating and refrigeration capacities are available.

An extensive line-up of ultraslim evaporators including the MXV 850 vertical evaporator are available for multi-product deliveries.

Contact your sales representative for more details.



Check out our specification table to choose the right Pulsor unit for your specific needs.

		Pulsor 300	Pulsor 350	Pulsor 400	Pulsor 500	Pulsor 400 MT	Pulsor 600 MT
Cooling Capacity Road (Watts)	0°C/+30°C	2 525	3 110	3 575	3 930	3 825	4 520
	-20°C/+30°C	1 260	1 780	1 930	2 165	1 930	2 376
Cooling Capacity Stand by (Watts)	0°C/+30°C	2 580	3 160	3 615	3 980	3 870	4 555
	-20°C/+30°C	1 275	1 805	1 915	2 180	1 990	2 385
Heating Capacity (Watts)		1 500	2 100	3 000	3 000	up to 2 100	up to 3 000
Airflow (m <sup>3</sup> /h)		700	1 000	1 500	1 500	up to 1 000	up to 1 500
Weight (Kg)		108	113	121	130	up to 135	up to 149
Dimensions (mm)		1124 x 577 x 233	1124 x 577 x 233	1124 x 577 x 233	1289 x 579 x 353	1124 x 577 x 233	1289 x 579 x 353
Sound Pressure (dB(A))*		57	57	57	57	57	57

\* Measured in Stand by mode



### Carrier IRAMO Together with a network of experts



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By combining fewer moving parts with a hermetic system, Pulsor requires less maintenance. When you do need help, advanced diagnostic tools keep maintenance time to a bare minimum, saving cost and maximising uptime. We've also developed a full range of services to help you improve fleet efficiency.

#### Large Network

Put your fleet in the hands of professionals. Using the latest equipment, 1700 fully trained technicians across 550 service centres are ready to keep your fleet on the road. We'll assist you wherever you are, 24 hours a day.

#### **Quality Parts**

The right parts at the right time. Rely on Carrier Genuine Performance Parts and you can be confident your fleet benefits from the best quality, availability, choice and cost efficiency.

#### **On Contract**

Plan ahead for peace of mind. Our Golden Cold contract and Silver Cold service packages ensure your equipment is always operating at maximum efficiency.

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