

EMBRACO pulse

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Brand
All
Climates



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Embraco Pulse scroll compressor

The Embraco Pulse is a digital variable-capacity scroll compressor that modulates its output by cycling between full compression (loaded) and a zero-compression (unloaded) state in cycles of 20 seconds. The Embraco Pulse control kit is also available to ensure stable temperatures, lower operating costs and a quieter system in refrigeration and heating.

A new range for different needs: 2 to 15 HP (Ton)



Cold rooms



Multi-deck reach-ins



Dryers

Product range

[illegible]



Main Benefits



Versatility for every application

Covers capacities from 2 to 15 HP/Tons for refrigeration and heating, delivering the full digital lineup.



Precise capacity modulation

Adjusts capacity from 10 to 100% for stable temperatures and accurate performance.



Smarter energy use

Reduces operating costs with low power consumption during the unloading cycle.



Exceptionally quiet operation

A unique loading and unloading mechanism delivers one of the lowest noise levels in this technology.



Reliable and protected operation

Capacity modulation reduces start-stop cycles and helps prevent liquid refrigerant return.



Total solution

Delivered as a full package with controller, sensors and valve, ready for seamless integration.

Product Offering

Application	Refrig.	Ph	Power Supply	Model	HP / Ton	Displac. (cc/Rev.)	Capacity (BTU/H)*		EER (BTU/H)/W*	
							50Hz	60Hz	50Hz	60Hz
Refrigeration Low Temp.	G - R404A, R448A, R449A, R452A, R134a, R450A, R513A, R507A, R417A, R407C C - R454C, R455A	3~	230 3~ (D) 60Hz 380 3~ (E) 60Hz 460 3~ (A) 60Hz 575 3~ (F) 60Hz 380/420 3~ (A) 50Hz 200/220 3~ (G) 50Hz	ELD13G*	4	67.2	15,794	18,952	5.3	5.3
				ELD20G*	6	98.7	23,820	28,584	6.0	6.0
				ELD39G*	13	207.0	49,970	59,964	5.9	5.9
Refrigeration Medium Temp.		3~		ERD21G*	3	48.0	17,607	21,541	7.0	7.0
				ERD30G*	4	67.2	25,877	29,732	7.3	7.3
				ERD37G*	5	82.0	30,806	37,346	7.3	7.2
				ERD45G*	6	98.7	37,758	45,310	7.2	7.2
				ERD51G*	7	109.5	40,905	51,582	7.4	7.3
				ERD78G*	10	168.7	65,062	78,075	7.4	7.4
				EWD16G*	2	34.8	17,863	21,747	13.2	13.0
				EWD22G*	3	48.0	22,981	29,322	13.3	13.7
Heating	3~	EWD32G*		4	67.2	34,851	42,180	14.0	13.7	
		EWD38G*		5	82.0	41,033	50,367	14.0	13.7	
		EWD49G*		6	98.7	50,597	61,054	14.1	13.9	
		EWD50G*		7	109.5	53,733	66,659	14.0	13.5	
		EWD56G*		7.5	120.8	61,170	75,564	14.3	13.4	
		EWD58G*		8	131.0	67,478	81,983	13.7	13.0	
		EWD67G*		9	146.0	74,929	91,038	13.8	13.1	
		EWD79G*		10	168.7	87,280	105,811	13.8	13.4	
		EWD91G*	12	192.8	99,166	122,463	13.8	13.1		
		EWD97G*	13	207.0	107,465	130,801	13.9	13.2		

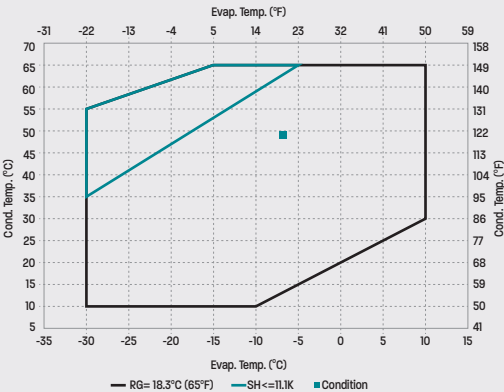
*Test Condition
Ref. MBP: E.T. -6.7°C (20°F) | C.T. 48.9°C (120°F) | Superheat 25K (45°F) | Subcooling 0K (0°F)
Ref. LBP: E.T. -31.7°C (-25°F) | C.T. 40.6°C (105°F) | Superheat 50K (90°F) | Subcooling 0K (0°F)
Heat Pump: E.T. 5°C (41°F) | C.T. 55°C (131°F) | Superheat 11.1K (20°F) | Subcooling 8.3K (15°F)

*Capacities apply only to models with refrigerant R404A.

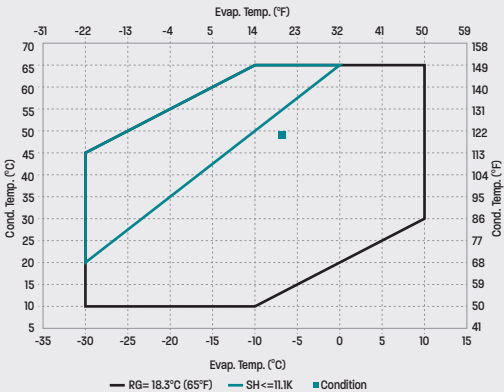
Operating Envelope

Refrigeration Medium Temp.

R404A, R452A
ERD

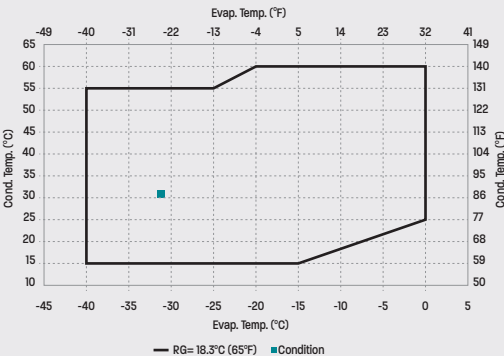


R448A, R449A, R454C, R455A
ERD



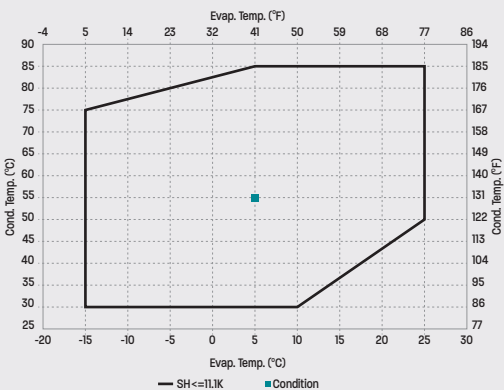
Refrigeration Low Temp.

R404A, R448A, R449A,
R452A, R454C, R455A
ELD



Heat Pump

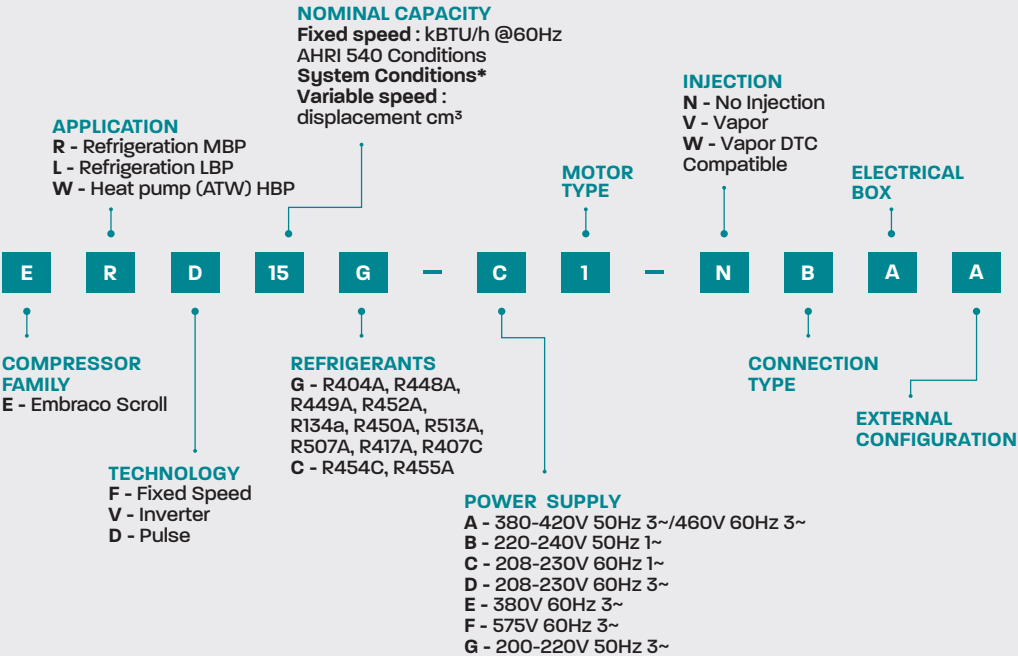
R134a
EWD



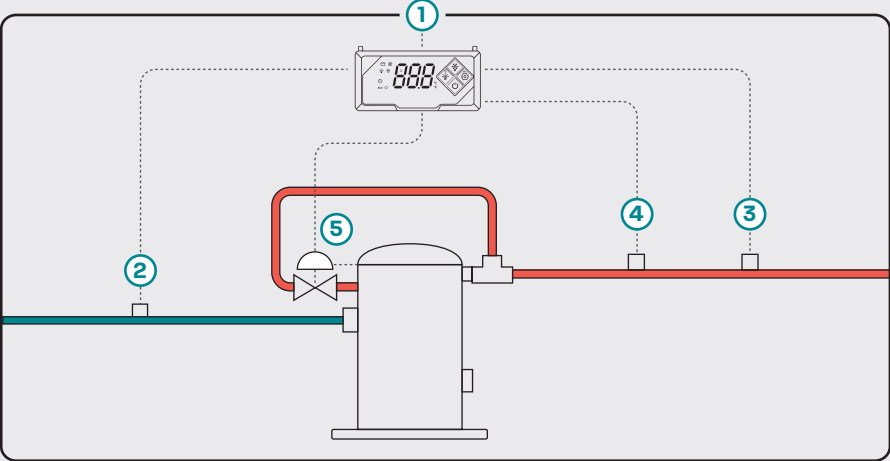
Embraco Pulse scroll solution

Solution	Quantity
Pulse Controller for Embraco Pulse Compressor	x1
Solenoid Valve	x1
Suction Pressure Transducer	x1
Discharge Temperature Sensor	x1
Discharge Pressure Transducer	Optional
Analog Signal Output Wire	Optional

Embraco Pulse scroll nomenclature

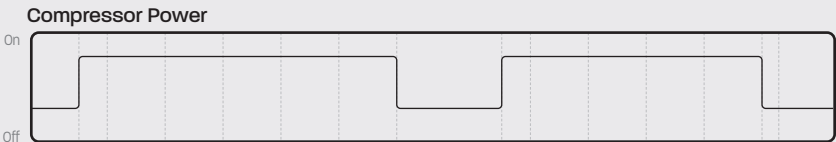
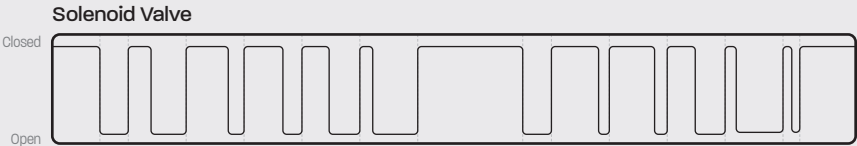
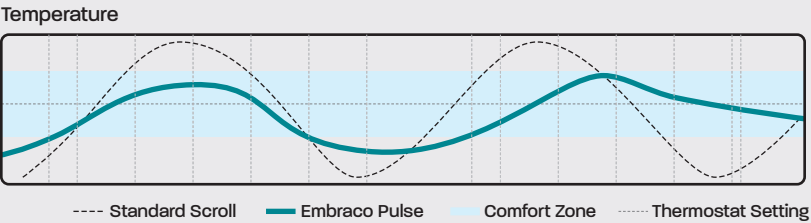


Embraco Pulse System Schematic



- ① Pulse Controller
- ② Suction Pressure Transducer
- ③ Discharge Pressure Transducer
- ④ Discharge Line Thermistor (DLT Sensor)
- ⑤ Solenoid Valve

Operating Logic & Performance: Standard Scroll vs Embraco Pulse



think ahead,
now in HVAC as well



Access now and see more
information, such as launch
details and cross references.

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