

EMBRACO pulse

One
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 and a zero-compression unloaded state in a typical 20-second rhythm, with digital control to ensure stable temperatures, lower operating costs and a quieter system in refrigeration and heating.

A new range for different needs: 1.2 to 15 HP (Ton)



Cold rooms



Multi-deck reach-ins



Agriculture (dryers)

Product range

Product Series	Refrigerant	HP/Ton	1	2	3	4	5	6	7	8	9	10	11	12	13	15	20	30
Refrigeration LBP	R404A, R448A, R449A, R452A, R134a, R513A, R507A, R454C, R455A	3ph																
Refrigeration MBP	R134a	3ph																
Heat Pump	R134a	3ph																

Main benefits



Versatility for every application

Covers capacities from 2 to 15 HP for refrigeration and heating, covering 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

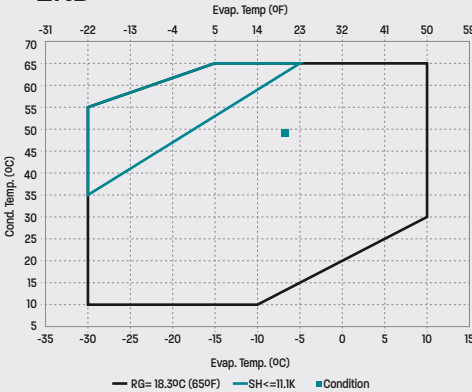
Application	Refrig.	Ph	Power Supply	Model	HP / Ton	Displac. (cc/Rev.)	Capacity (BTU/H)*		EER (BTU/H)/W*	
							50Hz	60Hz	50Hz	60Hz
Refrigeration Low Temp.	R404A R448A R449A R452A R134a	3~	230 3~ (D) 60Hz 380 3~ (E) 60Hz 460 3~ (A) 60Hz 575 3~ (F) 60Hz 380/420 3~ (A) 50Hz 200/220 3~ (G) 50Hz	ELD13G	4	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.	R452A R134a R513A R507A R454C R455A	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
Heating	R134a	3~		EDD16G	2	34.8	17,863	21,747	13.2	13.0
				EDD22G	3	48.0	22,981	29,322	13.3	13.7
				EDD32G	4	67.2	34,851	42,180	14.0	13.7
				EDD38G	5	82.0	41,033	50,367	14.0	13.7
				EDD49G	6	98.7	50,597	61,054	14.1	13.9
				EDD50G	7	109.5	53,733	66,659	14.0	13.5
			EDD56G	7.5	120.8	61,170	75,564	14.3	13.4	
			EDD58G	8	131.0	67,478	81,983	13.7	13.0	
			EDD67G	9	146.0	74,929	91,038	13.8	13.1	
			EDD79G	10	168.7	87,280	105,811	13.8	13.4	
			EDD91G	12	192.8	99,166	122,463	13.8	13.1	
			EDD97G	13	207.0	107,465	130,801	13.9	13.2	

*Test Condition
Ref. LBP: E.T. -6.7°C (20°F) | C.T. 48.9°C (120°F) | Superheat 25K (45°F) | Subcooling 0K (0°F)
Ref. MBP: 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) for R22, R410A and R134a

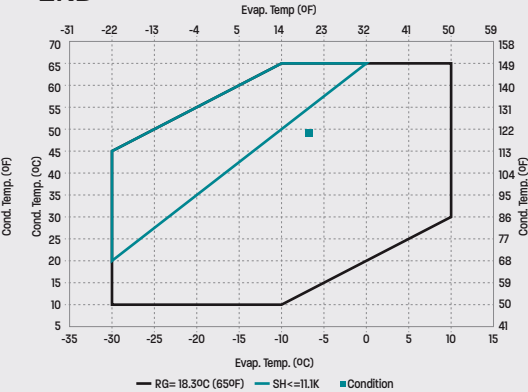
Operating envelope

Refrigeration MT

R404A, R452A
ERD

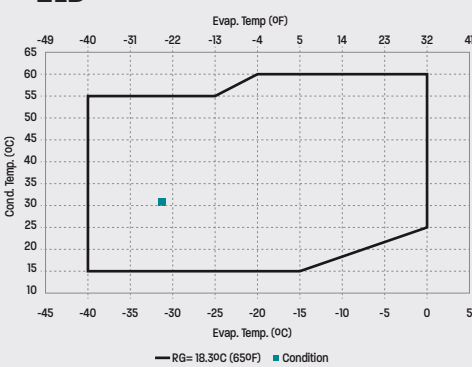


R448A, R449A, R454C, R455A
ERD



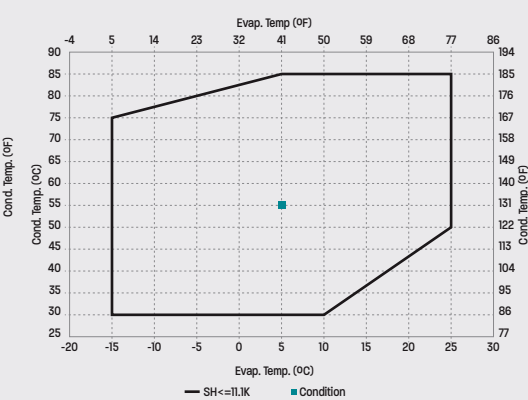
Refrigeration LT

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



Heat Pump

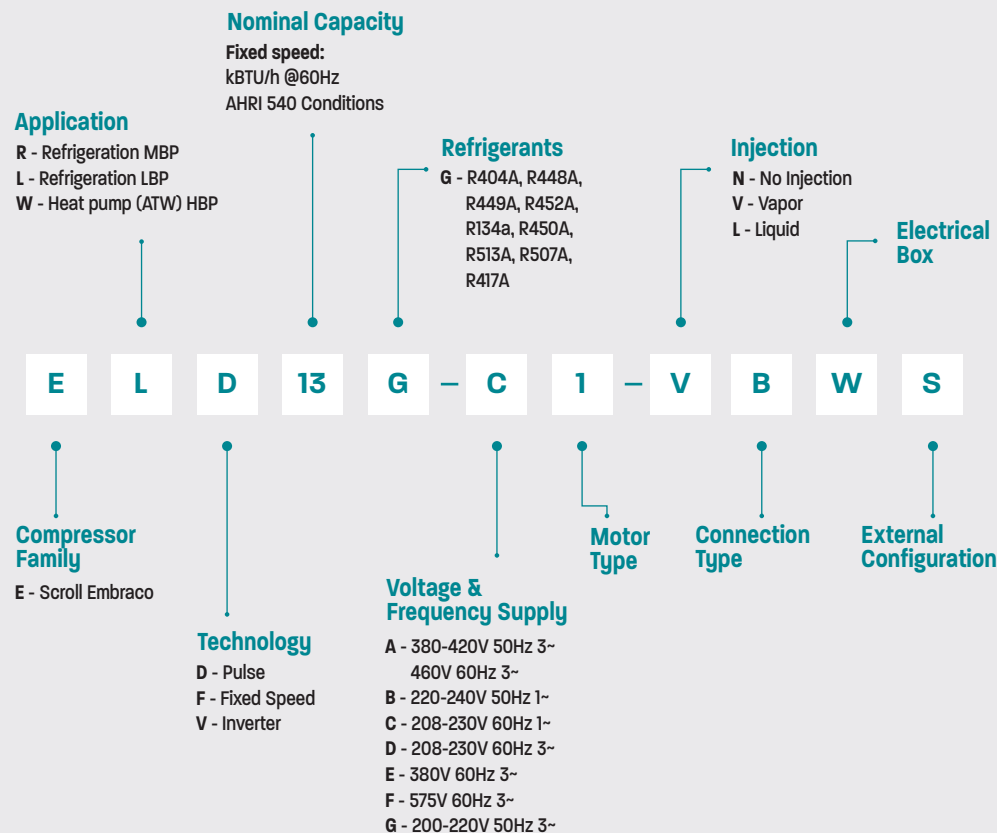
R134a
EWD



Embraco Pulse scroll solution

Solution	Function	Quantity
Pulse Controller for Embraco Pulse Compressor	Control single or double scroll compressor, also modulate fan speed of condensing unit	x1
Solenoid Valve	Controls the Embraco Pulse scroll compressor's loading and unloading	x1
Suction Pressure Transducer	Measure suction pressure, in order to control modulation cycle of Embraco Pulse scroll compressor	x1
Discharge Temperature Sensor	Measure discharge temperature, preventing compressor overheating	x1
Discharge Pressure Transducer	Measure discharge pressure, in order to modulate fan speed of condensing unit	Optional
Analogue Signal Output Wire	Connect with solid state relay	Optional

Embraco Pulse scroll nomenclature



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now in HVAC
as well

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



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