

Copeland Scroll™

Digital Receiver Unit HLR

Perfect Fit for High Efficiency and Limited Space Demands



The Best Choice for Remote Condenser Refrigeration Systems

Copeland Scroll Digital™ Receiver Units HLR are an innovative offering by Emerson Climate Technologies for food service and retail businesses. Their compact design and the power of Digital Scroll™ continuous capacity modulation allow for optimized environmental integration at highest system efficiency.

Flexibility for Optimum Building Integration

HLR Digital Receiver Units combine the concepts of remote condenser and digital modulation for maximized installation flexibility:

- Remote condensers can be selected to meet environmental constraints related to space, noise and energy efficiency
- Copeland Scroll Digital™ technology offers continuous capacity modulation for precise temperature control in small multi-evaporator systems
- Multi refrigerant approvals for wide choice of refrigerants including R134a, R404A, R407A and R407F.

Choice of Condenser Selection for Environmental Conditions

The Digital Receiver Unit can be combined with various third party condenser solutions:

- Condenser outdoor installation reducing indoor noise levels and maximizing indoor vending space
- Selection of low speed and low noise condenser fans to comply with outdoor noise regulations
- Generous condenser sizing for high system efficiency
- Use of water cooled condensers for heat recovery systems

Energy Saving

The latest Copeland Scroll Digital™ compressor technology offers significantly higher efficiency than traditional piston compressors in the target application. Digital Scroll™ continuous capacity modulation optimizes system operation under varying load conditions. The resulting precise suction pressure control raises overall system efficiency.

Simple System Design and Installation

HLR Digital Receiver Units are fully equipped for quick installation and maintenance, saving time and costs. The delivery scope includes:

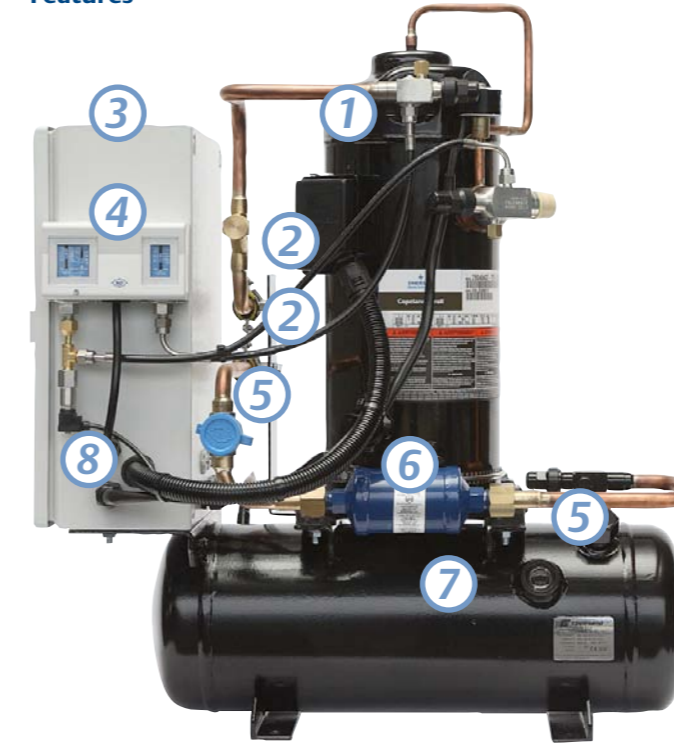
- Electronic control and protection devices
- Complete liquid line with filter dryer and sight glass
- Free standing concept and clear unit design
- Convenient access to all components

The wide Digital Scroll™ continuous capacity modulation range avoids the need for multiple condensing units, keeping overall system design simple.

High Reliability

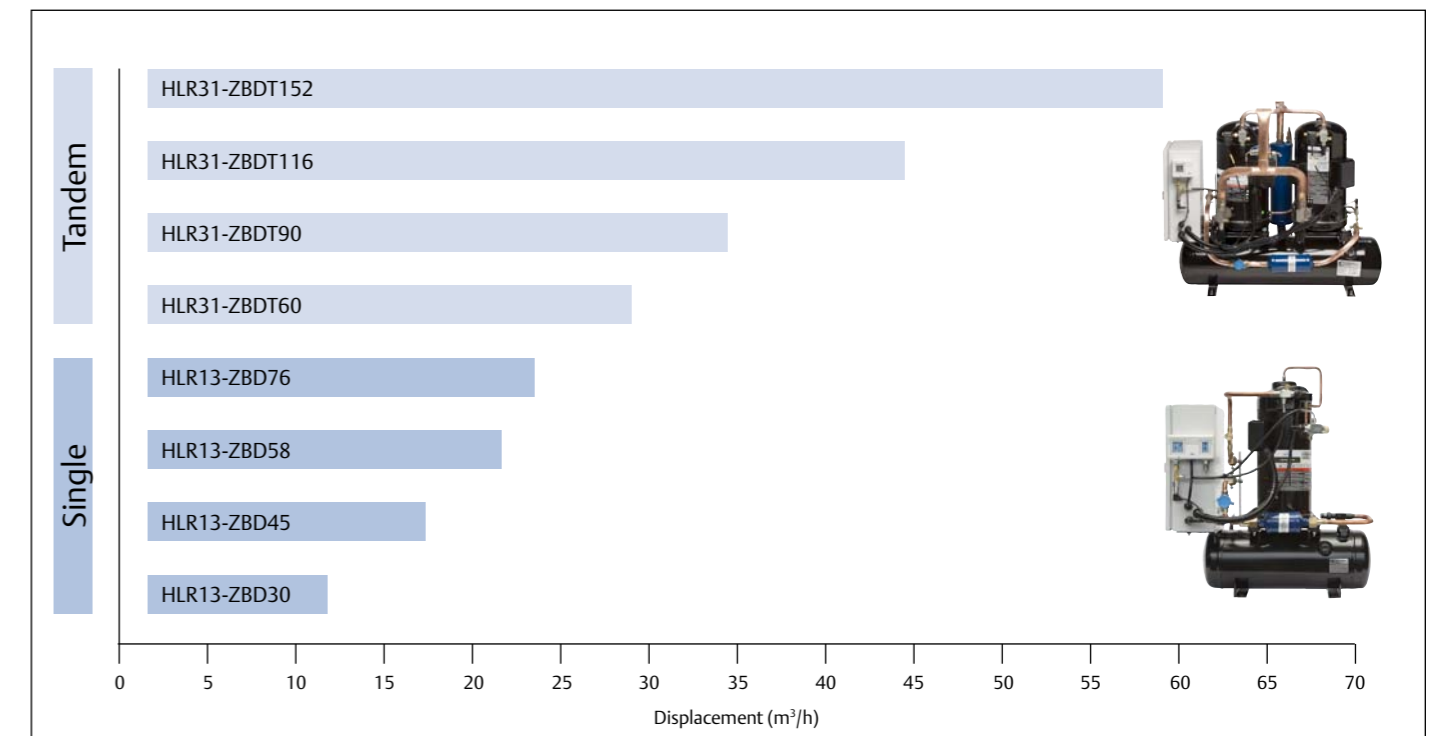
The HLR indoor installation concept reliably protects the heart of the cooling system. Carefully chosen and approved quality components and the built-in electronic overload protection guarantee long-term reliability.

Features



1. High efficiency Copeland Scroll Digital™ compressor with continuous capacity modulation
2. Easy accessible connections for discharge line and liquid line
3. Control unit with overload protector and EC2-552 Controller with TCP/IP Network Interface
4. Adjustable dual pressure switch
5. Sight glasses
6. Filter drier
7. High capacity horizontal receiver
8. Robust control box

Capacity Range



Digital Receiver Unit HLR



Technical Overview

Model	Single Compressor Units				Tandem Compressor Units			
	HLR13-ZBD30KE	HLR13-ZBD45KE	HLR13-ZBD58KE	HLR13-ZBD76KE	HLR31-ZBDT60KE	HLR31-ZBDT90KE	HLR31-ZBDT116KE	HLR31-ZBDT152KE
Nominal Horsepower (hp)	4	6	7.5	10	8	12	15	20
Displacement (m ³ /h)	11.7	17.1	22.1	23.4	28.8	34.1	44.2	58.2
Voltage (V)	TFD (380-420/3~ 50Hz)				TFD (380-420/3~ 50Hz)			
Receiver with Sight Glass, Volume (l)	13	13	13	13	31	31	31	31
Suction Line Ø (inch) with Rotalock	7/8	7/8	1 1/8	1 3/8	1 3/8	1 3/8	1 3/8	1 3/8
Discharge Line Ø (inch) with Rotalock	5/8	5/8	3/4	3/4	7/8	7/8	1 1/8	1 3/8
Liquid Receiver Inlet Ø (inch)	5/8	5/8	5/8	5/8	5/8	5/8	7/8	7/8
Liquid Receiver Outlet Ø (inch) with Rotalock	5/8	5/8	5/8	5/8	5/8	5/8	7/8	7/8
Height x Depth x Width (mm)	710 x 400 x 690		710 x 400 x 725		910 x 480 x 970		870 x 480 x 970	
Weight (kg)	72	75	84	90	130	138	165	175
Crank Case Heater	✓	✓	✓	✓	✓	✓	✓	✓
Electrical Box with: Overload Protection, Contractor and Fuse	✓	✓	✓	✓	✓	✓	✓	✓
Liquid Line equipped with: Filter Drier and Sight Glass	✓	✓	✓	✓	✓	✓	✓	✓
EC2-552 Controller with: TCP/IP Network Interface, Continuous Suction Pressure Control and Continuous Condensing Pressure Control	✓	✓	✓	✓	✓	✓	✓	✓
HP/LP Switch	PS2 (HP/LP)	PS2 (HP/LP)	PS2 (HP/LP)	PS2 (HP/LP)	PS1 + 2 x PS3	PS1 + 2 x PS3	PS1 + 2 x PS3	PS1 + 2 x PS3
Oil Separator	-	-	-	-	✓	✓	✓	✓

* @ EN 12900 MT Condition: R404A, -10/32°C, SGT = 20°C

For more details, see www.emersonclimate.eu

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