

Approval list – Emkarate RL

EQUIPMENT MANUFACTURER	COMPRESSOR TYPE/MODEL	APPROVED EMKARATE RL GRADE (s)
AKA KYLA (FORCE)	HFC refrigeration systems	RL32H
AMERICOLD	R134a Hermetic reciprocating compressors	RL7H, RL10H, RL15S, RL15H, RL22H & RL7HPlus
APV BAKER	Screw compressors	RL100S
ARCELIK	R134a Hermetic reciprocating compressors	RL22H
ARCTIC CIRCLE	Advanced range of semi-hermetic reciprocating	RL32S
BERVA	R134a Hermetic reciprocating compressors	RL22H
BITZER	Reciprocating Reciprocating 4UFY & 4NFY for Auto a/c Screw compressors	RL32H & RL68H RL32S & RL68S RL170H
BLISSFIELD	Reciprocating compressors	RL32H RL68H (original fill on all models)
BOCK	Reciprocating compressors	RL22H, RL32H, RL46H, RL68H & RL100H
BOEING	Service (Aerospace) Reciprocating Centrifugal (17Dam 17EA) Centrifugal (17MPS, 17FA) Centrifugal (17EX, 19EA, EB, FA, 19XL/TX)	RL68H RL22H RL32H RL68H RL68HP
BPL ENGINEERING	HFC refrigeration systems	RL22H
BRISTOL	B type inertia compressors	RL32S
CARRIER	Centrifugal chillers R134a Externally geared centrifugal chillers R134a Internally geared centrifugal chillers R134a Screw compressors	RL32H RL68H RL68HP RL170H
CARRIER CARLYLE	Reciprocating compressors, R134a, R404A, R407C, R507, R22 Screw compressors, R134a, R404A, R507 & R22 Low temp, medium temp and a/c. Centrifugal HFC compressors	RL22H, RL32H, RL68H & RL68HP RL100S RL220H
CARRIER	Reciprocating (Marine containers)	RL22H
TRANSICOLD	Centrifugal (19EX, 19XR/XRT) Centrifugal (17EX, 17FA with external gears) Reciprocating (05G, 5K, 5H, 06D, 06E, 06CC) Screw (05T, 06T) Screw (23XL, 23XG, 30GX, 30HX) Scroll Reciprocating (for marine containers) R134a, R404A & R507	RL68HP RL68H RL68H RL100E RL220XL RL32-3MAF RL22H
CARRIER TOYO	Reciprocating Centrifugal Screw (06NF, 06NH)	RL68H RL68HP RL220Hplus
CONCEPT SERVICES	HFC refrigeration systems	RL32-3MAF, RL32H
DAIKIN/MCQUAY	Centrifugal (for all compressors) Screw compressors Snyder General Snyder General / McQuay centrifugal chiller CEH 050, 063, 079, 087 Snyder General / McQuay centrifugal chiller CEH 100, 126	RL32H RL68H, RL68HB, RL100H & RL220H RL46H, RL22N, RL22H RL32H RL46H
DALIAN BINGSHAN	Reciprocating compressors Screw compressors	RL32H RL170H
DAN FU	R134a	RL22H
COMPRESSORS		
DANFOSS	Scroll compressors (SZ, MFZ, LFZ)	RL32H
COMMERCIAL (MANEUROP)	Reciprocating compressors (LTZ, NTZ) R134a Hermetic reciprocating compressors	RL32H RL10H, RL15S, RL17D, RL22DR, RL32DR, RL22H & RL32H
DORIN	Reciprocating compressors with all HFC's Semi-hermetic compressors	RL22H, RL32H, RL46H & RL68H RL22H
DUNHAM BUSH	D-B Metic & D-Line reciprocating compressors	RL32H & RL68H

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	Vertical screw compressors	RL68H
	Screw	RL68H, RL100E, RL170H
ELGIN MAQUINAS EMBRACO	Hermetic compressors	RL32S
	Reciprocating compressors	RL22H
	R134a Hermetic reciprocating compressors	RL22HB, RL10H & RL22H
	Frigidaire models	RL7H, RL10H, RL22H
EMERSON COPELAND	Reciprocating & scroll compressors	RL32-3MAF, 32CF & 22CF
	Scroll R744 Z0 Carbon Dioxide	RL68HB
	Scroll HFC compressors	RL32S, RL32-3MAF, RL32-3MAQ
	Screw	RL170H
FRASCOLD	Reciprocating & screw compressors	RL32H, RL68H, RL100H & RL170H
	Sub-critical R744 Carbon Dioxide piston compressor	RL68HB
	All Semi-hermetic compressors	RL32S & RL68S
	Ammonia screw, MO	RL3MO, RL4MO
FRIGIDAIRE	HFC refrigeration systems	RL7H, RL22H
	Embraco/Americold hermetic compressors	RL10H
FRIGOPOL	Reciprocating compressors R407 & R407C	RL32H
	Reciprocating compressors (60-DLB-13 to 80-DLB-30)	RL32H
	Reciprocating compressors with all HFC refrigerants	RL32SB, 32S
GELFRED	Advanced range of semi-hermetic reciprocating	RL32S
	R134a, R404A & R407B	
GODREJ GRASSO (GEA)	HFC refrigeration systems	RL32H
	All reciprocating compressors	RL32H, RL68H & RL100H, RL100E
	Screw	RL100E & RL170H
	C...XF Screw. R134a, R404A, R407c, R410A, R507	RL68H, RL220H
GREE	R600a Isobutane appliance compressor, initial fill	RL600B4P
HARTFORD	Reciprocating compressors (M)/(H)	RL32H/RL68H
HANBELL	Screw compressors, R407C	RL68S, RL100S, RL150S
	Screw compressors (RA, RB & V Series)	RL170H & RL220H
	Screw & Centrifugal compressors	RL32H, RL68H, RL100H, RL170H, RL220H
HISPACOLD	Bus/train air con semi-hermetic reciprocating compressors	RL68S
	Semi-hermetic reciprocating compressors	RL68H
HUAYI	R600a Isobutane appliance compressor, initial fill	RL600B4P
	Compressor range U R290-R404A-R134a	RL10H
	R134a Hermetic reciprocating compressors	RL32S
J & E HALL (Daikin)	Centrifugal	RL32H
	Screw	RL68H, RL68HB, RL100H, RL150S & RL220H, RL68HP, RL100E, RL220Hplus
JIANBSU BAISUE	Reciprocating compressors, R134a, R600a & R152A	RL22H
JIANGSU XUEMEI	Reciprocating compressors	RL22H & RL32H
JIAZIPERA	R600a Isobutane appliance compressor, initial fill	RL600B4P
KELVINATOR	R134a Hermetic reciprocator	RL32H
KINGTEC (China)	Truck refrigeration units	RL68S
KIRBY	R134a Hermetic reciprocating compressors	RL32S
KOBELCO (Japan)	Screw compressor	RL46H
	Screw	RL220Hplus
KULTHORN KIRBY	R134a Hermetic reciprocating compressors	RL32SE
LG Electric	R134a	RL15H & RL22H
LOCKHEED MARTIN	Reciprocating HFC compressors	RL68H
	Service	RL68H
MAYEKAWA	Mycom J series Inter-soluble, R404A, R507A, R410A	RL68H
	Screw	RL100E
	Reciprocating	RL68H, RL100E
MATSUSHITA	R134a Hermetic reciprocating compressors	RL10H, RL15H & RL22H
	DA & Q series models	RL10HLN, RL22H & RL22HLN (low noise)
NATO MILITARY NSN	NSN 6850-P4314-H	RL32H
	NSN 9150-99-870-1432	RL32HB
	NSN 9150-01-443-9390	RL46H
	NSN 9150-01-443-9396	RL46H
	NSN 9150-01-435-1899	RL68H

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	NSN 9150-01-410-8972	RL68H
	NSN 9150-01-387-4469	RL68H
NECCHI	R134a Hermetic reciprocating compressors	RL22H
PANASONIC	Reciprocating HFC compressors	RL10H, RL10HLN, RL15H, RL15HLN, RL22H & RL22HLN
PRESTCOLD (Copeland Group)	Reciprocating compressors	RL32-3MAF
	Semi-hermetic compressors	RL32S
REFCOMP	Reciprocating compressors (SRC-F, SRC-M, SRC-L, SRC-P)	RL32H & RL68H
ROLTEC	Screw compressors (with all HFC's)	RL46H & RL170H
ROTOCOLD	Rotary vane compressors	RL68S
ROYCE	Reciprocating compressors with R134a	RL32H, RL32SB
SABROE (Johnson Controls)	Reciprocating compressor	RL32H, RL32S, RL46H, RL46S, RL68H, RL68S
	Screw compressor	RL100H, RL100S, RL150S, RL170H & RL220H
SAMSUNG	R134a Hermetic reciprocating compressors	RL10HNS
SANYO OSAKA	R134a Hermetic reciprocating compressors	RL15HBE
SANYO TOKYO	R134a Hermetic reciprocating compressors	RL10HBE & RL15HBE
SEA CONTAINERS	Reciprocating HFC compressors	RL32S
SICOM	R134a Hermetic reciprocating compressors	RL32S
SRM	Twin screw compressors	RL150S
STAR	R134a Recips > -30°C	RL32H, RL68H
REFRIGERATION	R134a Scroll	RL32CF
	R404A, R407a, R407b, R507 Recips, > -40°C, <0°C	RL32H, RL68H
	R404A, R407a, R407b, R507 Recips, > -15°C, <+15°C	RL32H, RL100H
	R404A, R407a, R407b, R507 Scroll	RL32CF
TECUMSEH	Reciprocating HFC compressors	RL22H, RL10H, RL15H, RL32HA, RL32SE, RL32HT & RL32S
	Hermetic reciprocating	RL32HA, RL32HB, RL32HT & RL22HB (RL22HB for AL & AZ models)
	R134a Hermetic reciprocating compressors	RL10H (H-277) RL15H (H-278) & RL22H
	Scroll compressors	RL32H
	Reciprocating for containers	RL32H & RL100S (for China)
THERMOKING (Ingersoll Rand)		
TRANE (Ingersoll Rand)	Screw compressors	RL68H
	Scroll compressors	RL32HB
TRUE	Tecumseh compressors	RL32S & RL32-3MAF
TURKELECTRIK	R134a Hermetic reciprocating compressors	RL22H
UNIDAD HERMETICA	Reciprocating HFC compressors	RL46HB
	R134a Hermetic reciprocating compressors	RL22H & RL15EB
VATANU-COOL	Orbital Vane Rotary (OVR) compressors	RL220H
VERDICHTER	R134a Hermetic reciprocating compressors	RL22H & RL15EB
WANBAO	R600a Isobutane appliance compressor, initial fill	RL600B4P
WHIRLPOOL	R134a Hermetic reciprocating compressors	RL10H
YANTAI MOON	Reciprocating compressors	RL32H
ZANUSSI	R134a Hermetic reciprocating compressors	RL22H & RL15EB
ZEL Beijing	R134a Hermetic reciprocating compressors	RL15EB
ZEL Shanghai	R134a Hermetic reciprocating compressors	RL9EB & RL15EB

This approvals list should be used as a guide only. CPI Fluid Engineering recommends that users confirm with the original equipment manufacturer (OEM) which EMKARATE RL grade is qualified for use with a particular combination of compressor model, refrigerant and application. OEM's advice should always be taken. Only use approved lubricants.