

R290 · 220–240V | 50Hz · 115–127V | 60Hz

COMBINING COMPACT SIZE WITH HIGH PERFORMANCE

SECCP



- **Increased Cooling Capacity**
 - Extended displacement for a wider range of applications
- **First-Class Robustness**
 - Improved robustness for liquid return
 - Increased stability during defrosting by hot gas
 - Improved noise/vibration reduction compared to similar products
- **Optimized Electrical System (IP23 Protection Class)**
 - More compact, easier installation
 - Additional connections
 - Flexible configuration options
- **Innovative Solution for Flammable Refrigerants**
 - Innovative patented hermetic terminal plug
- **Multiple Conformity**
 - Natural refrigerant solution
 - Low GWP at maximum capacity
 - Regulatory compliance and environmentally friendly with R290

The new **NLE Plus** refrigeration compressor series from Secop expands the legendary N-Series by a displacement of 14 and 15 cm³. It combines compact size with high performance and is optimized for R290 (propane) to ensure high energy efficiency. This solution is perfect for applications such as supermarket refrigerators/freezers, walk-in freezers, double glass door merchandizers, and much more.

Secop sets new standards in terms of compactness, cooling capacity and reliability with the NLE Plus series. It has been specially developed to support the new IEC approvals for HC refrigerant charges from 150 g to 500 g in commercial refrigeration systems and offers an ultra-compact hermetic compressor solution.

Secop NLE Plus compressors offer optimized start equipment, are resistant to extreme liquid refrigerant returns, and include a special solution for a safe use of flammable hydrocarbons refrigerants. The starting accessories include a highly integrated relay as well as starting and running capacitors. These components are compact and easy to install and come with integrated PTC and NTC to reduce peak currents and voltage spikes, which increases safety and service life. In addition, the series is equipped with a patented Secop hermetic terminal plug that ensures safe use of the R290 refrigerant to prevent root causes of electrical arcs injection with flammable refrigerants.

General	NLE14LNDX*	NLE14MNDX*	NLE15LNDX*	NLE15MNDX*
Compressor	105H7402	105H7403	105H7500	n/a
Approvals	EN60335-1, EN 60335-2-34 with Annex AA, IEC/EN 60079-1, IEC/EN 60079-15			

*preliminary data

Application	R290				
Application	LBP	MBP	LBP	MBP	
Evaporating temperature	°C	-40 to -5	-25 to 10	-40 to -5	-25 to 10
Voltage range / frequency	V/Hz	198-254/50	198-254/50	198-254/50	198-254/50

Performance Data ASHRAE LBP/MBP (220 V, 50 Hz • fan cooling)					
Evaporating temperature	°C	-23.3	-6.7	-23.3	-6.7
Cooling capacity	W	670	1203	740	n/a
Power consumption	W	419	601	463	n/a
COP	W/W	1.60	2.00	1.60	n/a

General	NLE14LNHX*	NLE14MNHX*	NLE15LNHX*	NLE15MNHX*
Compressor	105H7401	105H7400	105H7502	105H7501
Approvals	UL 60335-2-34, UL 60079-1, UL 60079-15			

*preliminary data

Application	R290				
Application	LBP	MBP	LBP	MBP	
Evaporating temperature	°F	-40 to 23	-13 to 50	-40 to 23	-13 to 50
Voltage range / frequency	V/Hz	108-140/60	108-140/60	108-140/60	108-140/60

Performance Data ASHRAE LBP/MBP (120 V, 60 Hz • fan cooling)					
Evaporating temperature	°F	-10	20	-10	20
Cooling capacity	BTU/h	2731	4873	2963	5388
Power consumption	W	524	704	568	778
EER	BTU/Wh	5.22	6.92	5.22	6.92

Dimensions		NLE-L/MNDX (metric)		NLE-L/MNHX (inch)	
Height	mm (inch)	A	209	8.23	
		B	203	7.99	
Suction connector	location/I.D. mm (inch) angle material seal	C	8.2 30° Copper Rubber plug	0.320-0.327 30° Copper Rubber plug	
			Process connector	D	6.2 35° Copper Rubber plug
Discharge connector	E	6.2 40° Copper Rubber plug			0.252-0.259 40° Copper Rubber plug
		Connector tolerance	I.D. mm	±0.09	

Test conditions
 LBP: Condensing temp.: 54.4°C (130°F) | Suction gas temp.: 32.2°C (90°F) Ambient temp.: 32.2°C (90°F) | Liquid temp.: 32.2°C (90°F)
 MBP: Condensing temp.: 54.4°C (130°F) | Suction gas temp.: 35°C (95°F) Ambient temp.: 32.2°C (90°F) | Liquid temp.: 46.1°C (115°F)

