

### Nomenclature

Family, lubricant & refrigerant <b>SZ</b> <b>SY</b>	Nominal capacity <b>185</b> <b>300</b>	-	Voltage <b>4</b> <b>7</b>	Version <b>R</b> <b>CA</b>	Evolution index <b>C</b> <b>A</b>	Single compressors Single compressors																																			
<p>Family, lubricant &amp; refrigerant SM: Scroll, Mineral oil, R22/R417A* SY: Scroll, POE lubricant, R22/R417A (and R407C for SY185-240-300) SZ: Scroll, POE lubricant, R407C - R134a (and R404A, R507A for SZ084 to SZ185)</p> <p>Nominal capacity in thousand Btu/h at 60 Hz, R22, ARI conditions</p> <p>Motor voltage code 3: 200-230V/3~/60 Hz 4: 380-400V/3~/50 - 460V/3~/60 Hz 6: 230V/3~/50 Hz 7: 500V/3~/50 Hz - 575V/3~/60 Hz 9: 380V/3~/60 Hz</p>	<table border="1"> <thead> <tr> <th>Motor protection type</th> <th>Connection</th> <th>Module voltage</th> <th>Applies to</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Internal overload protector</td> <td>V : brazed</td> <td></td> <td>S 084-090-100-110-120-148-161</td> </tr> <tr> <td>A : brazed</td> <td></td> <td>S 112-124-147</td> </tr> <tr> <td rowspan="2">Internal thermostat</td> <td>C : brazed</td> <td></td> <td rowspan="2">S 175-185</td> </tr> <tr> <td>R : rotolock</td> <td></td> </tr> <tr> <td rowspan="6">Electronic protection module</td> <td>P : brazed</td> <td>24 V AC</td> <td rowspan="6">S 240 - 300</td> </tr> <tr> <td>X : brazed</td> <td>230 V</td> </tr> <tr> <td>S : rotolock</td> <td>24 V AC</td> </tr> <tr> <td>Y : rotolock</td> <td>230 V</td> </tr> <tr> <td>CA : C: brazed</td> <td>A: 24V AC B: 115/230V</td> </tr> <tr> <td>CB : P: rotolock</td> <td>A: 24V AC B: 115/230V</td> </tr> <tr> <td rowspan="2">CA : C: brazed</td> <td>A: 24V AC</td> <td>S 380</td> </tr> <tr> <td>B: 115/230V</td> <td></td> </tr> </tbody> </table>					Motor protection type	Connection	Module voltage	Applies to	Internal overload protector	V : brazed		S 084-090-100-110-120-148-161	A : brazed		S 112-124-147	Internal thermostat	C : brazed		S 175-185	R : rotolock		Electronic protection module	P : brazed	24 V AC	S 240 - 300	X : brazed	230 V	S : rotolock	24 V AC	Y : rotolock	230 V	CA : C: brazed	A: 24V AC B: 115/230V	CB : P: rotolock	A: 24V AC B: 115/230V	CA : C: brazed	A: 24V AC	S 380	B: 115/230V	
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\* When SM compressors are used with R417A, the factory charged mineral oil 160P must be replaced by polyolester oil 160SZ

Motor protection type	Connection	Module voltage	Applies to
Internal overload protector	V : brazed		S 084-090-100-110-120-148-161
	A : brazed		S 112-124-147
Internal thermostat	C : brazed		S 175-185
	R : rotolock		
Electronic protection module	P : brazed	24 V AC	S 240 - 300
	X : brazed	230 V	
	S : rotolock	24 V AC	
	Y : rotolock	230 V	
	CA : C: brazed	A: 24V AC B: 115/230V	
	CB : P: rotolock	A: 24V AC B: 115/230V	
CA : C: brazed	A: 24V AC	S 380	
	B: 115/230V		

Motor protection type	Connection	Module voltage	Applies to	
Internal overload protector	V : brazed		S 084-090-100-110-120-148-161	
	A : brazed		S 112-124-147	
Internal thermostat	C : brazed		S 175-185	
	R : rotolock			
Electronic protection module	J : brazed	24 V DC	S 115-125-160-175-185	
	P : brazed	24 V AC		
	U : brazed	115 V		
	X : brazed	230 V		
	K : rotolock	24 V DC		
	S : rotolock	24 V AC		
	W : rotolock	115 V		
	Y : rotolock	230 V		
	AF : A: brazed	F: 24V DC		S 240 - 300
	AA : A: 24V AC	A: 24V AC		
AB : B: 115/230V	B: 115/230V			
MA : M: rotolock	A: 24V AC	S 380 *		
MB : B: 115/230V	B: 115/230V			
CA : C: brazed	A: 24V AC B: 115/230V			
CB : A: 24V AC	F: 24V DC			
CF : B: 115/230V				

### Motor protection modules and transformers



Code n°	Description	Application	Packaging	Pack size
120Z0141	Electronic motor protection module, 24 V DC		Single pack	1
8169020	Electronic motor protection module, 24 V AC	SM/SZ115-185 & SH180	Single pack	1
8169021	Electronic motor protection module, 230 V		Single pack	1
120Z0140	Electronic motor protection module, 24 V DC		Single pack	1
8169015	Electronic motor protection module, 24 V AC	SV/SZ240-380 & SH240-485	Single pack	1
8169016	Electronic motor protection module, 115/230 V		Single pack	1