

### 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> <p>* When SM compressors are used with R417A, the factory charged mineral oil 160P must be replaced by polyolester oil 160SZ</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">Electronic protection module</td> <td>CA : C: brazed</td> <td>A: 24V AC</td> <td rowspan="2">S 380</td> </tr> <tr> <td>CB : C: brazed</td> <td>A: 24V AC B: 115/230V</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	Electronic protection module	CA : C: brazed	A: 24V AC	S 380	CB : C: brazed	A: 24V AC B: 115/230V
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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	
Electronic protection module	CA : C: brazed	A: 24V AC	S 380
	CB : C: brazed	A: 24V AC 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 E: 24V DC			

### 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