



## 6.1 GP1R Refrigerated Spare Parts

**Sorvall:**

Legend X1R,  
ST 16R

**Thermo Scientific:**

SL16R,  
Multifuge X1R

(formerly known as Heraeus Multiguge X1 – series),

**Megafuge 16R**

(formerly known as Heraeus Megafuge 16 – series)



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# Centrifuges Overview

- Sorvall ST 16R
- Thermo Scientific SL 16R
- Thermo Scientific Megafuge 16R
- Sorvall Legend X1R
- Thermo Scientific Multifuge X1R



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**Refrigerated Units:** Multifuge X1R – Series / Megafuge 16R – series / Legend X1R – series / ST16R – series / SL16R - series

# Outer Housing

[Pos. 1000](#) →



↑ [Pos. 1050](#)

↑ [Pos. 1060](#)

↑ [Pos. 1070](#)

↓ [Pos. 1110](#)  
↓ [Pos. 1130](#)  
↓ [Pos. 1150](#)

↓ [Pos. 1120](#)  
↓ [Pos. 1140](#)



→ [Pos. 1250](#)



← [Pos. 1200](#)



→ [Pos. 1450](#)



← [Pos. 1400](#)



↑ [Pos. 1300](#)



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Refrigerated Units: Multifuge X1R – Series / Megafuge 16R – series / Legend X1R – series / ST16R – series / SL16R - series

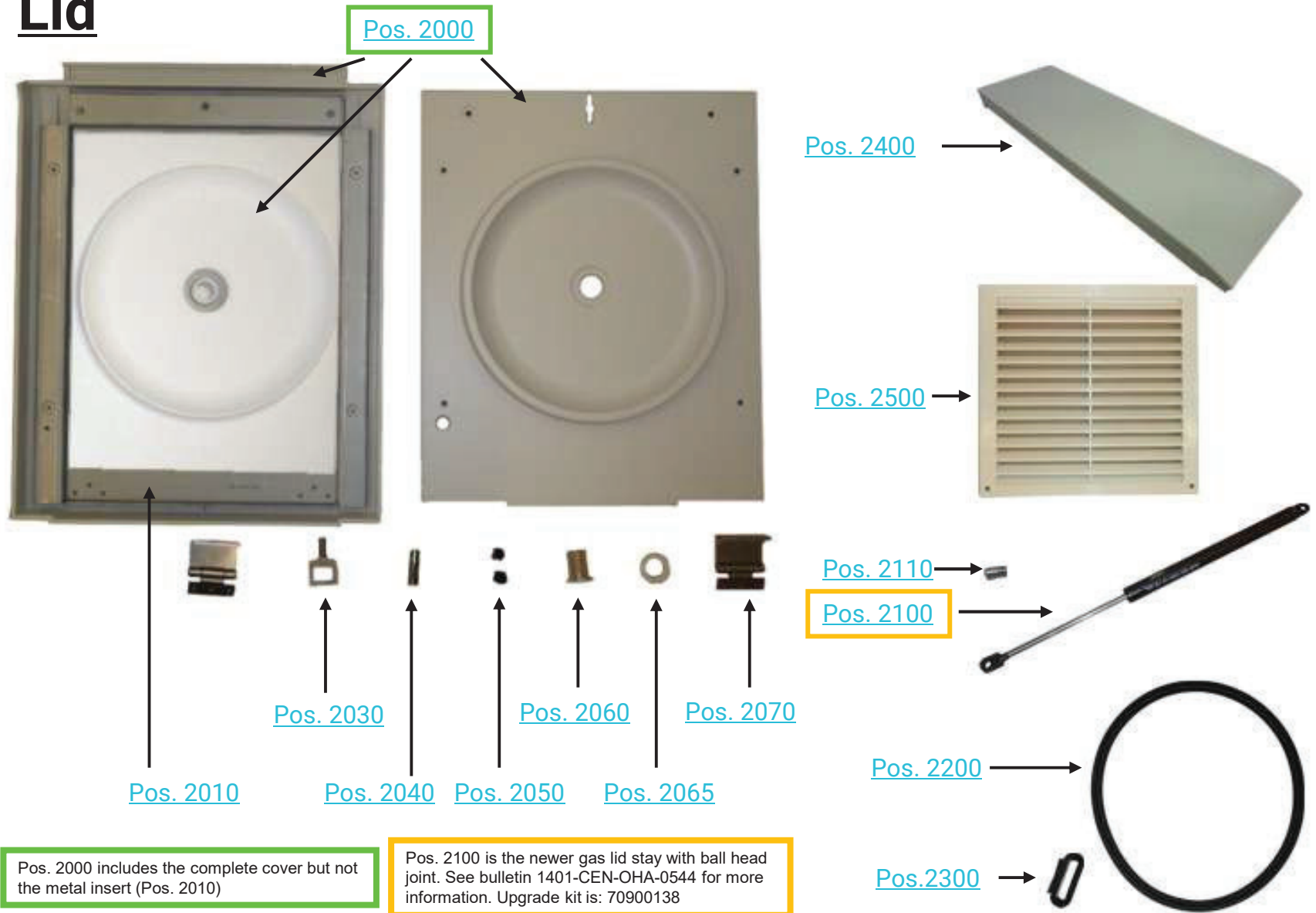
# Spare Parts Outer Housing

Pos.	Part Nr.:	Description:	Multi X1R	Mega 16R	Legend X1R	ST 16R	SL 16R	Required Tools	Additional Recommended Tools
1000	70902037	Front Panel (complete, incl. Pos. 1050, 1060, 1070) /	X	X	X	X	X	4mm Allen	
1050	20480320	Screw for plastic parts	X	X	X	X	X	4mm Allen, Torx 30	
1060	20480317	Washer	X	X	X	X	X		
1070	20290706	O-Ring	X	X	X	X	X		
1110	50161916	Keypad Overlay Multifuge X1R	X					4mm Allen	
1120	50161883	Keypad Overlay Megafuge 16R		X					
1130	20058707	Keypad Overlay Legend X1R			X				
1140	20058709	Keypad Overlay ST 16R				X			
1150	200587111	Keypad Overlay SL 16R					X		
1200	20058421	Display frame high end	X		X			4mm Allen, Torx 15	
1250	20058419	Display frame routine		X		X	X		
1300	20150285	Keypad adaptor	X	X	X	X	X	4mm Allen, Torx 15	
1400	20150281	Display 16+24 high end	X		X			4mm Allen, Torx 15	
1450	20150282	Display 26x1 routine		X		X	X		

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# Lid



Pos. 2000 includes the complete cover but not the metal insert (Pos. 2010)

Pos. 2100 is the newer gas lid stay with ball head joint. See bulletin 1401-CEN-OHA-0544 for more information. Upgrade kit is: 70900138

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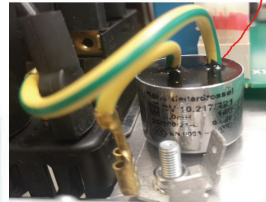
[Overview](#)



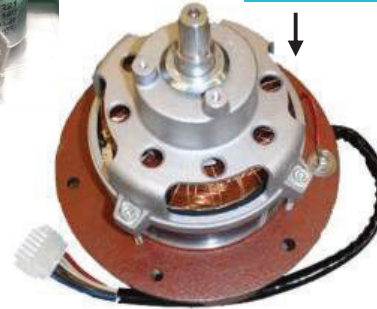
# Electronics



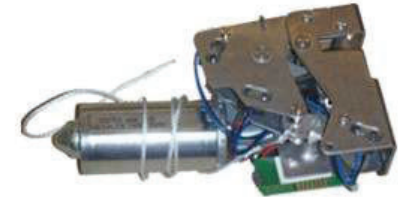
Grounding Coil  
20170362



Pos. 3200



Pos. 3500

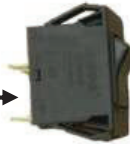


Pos. 3700

Pos. 3000

**Pos. 3000:**  
Includes the main PCB but not Pos. 3010, 3020, 3030, 3040 and 3700!

Pos. 3030



Pos. 3010

Pos. 3400



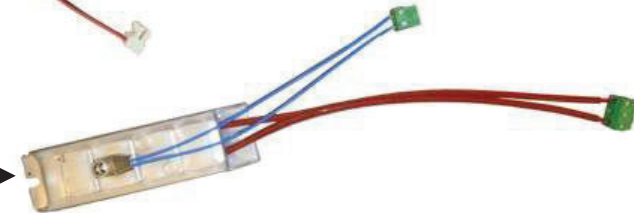
Pos. 3100



Pos. 3020



Pos. 3040



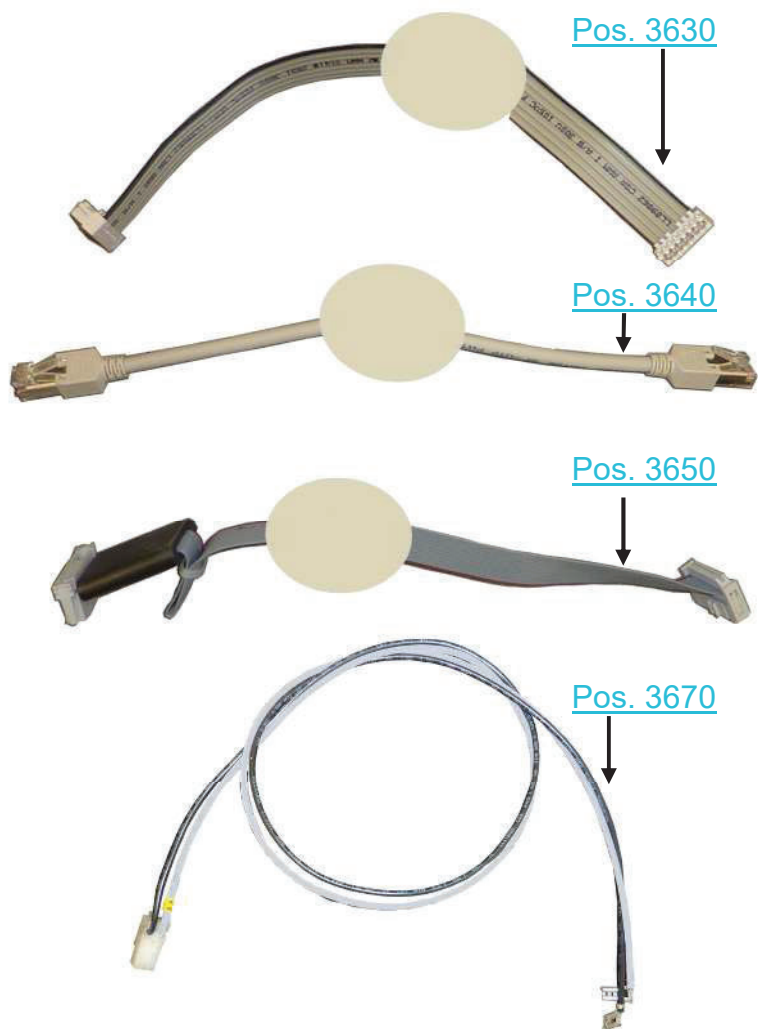
**Always use the dedicated power cable.**

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Refrigerated Units: Multifuge X1R – Series / Megafuge 16R – series / Legend X1R – series / ST16R – series / SL16R – series



# Electronics



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Refrigerated Units: Multifuge X1R – Series / Megafuge 16R – series / Legend X1R – series / ST16R – series / SL16R - series

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# Spare Parts Electronics

Pos.	Part Nr.:	Description:	230 V	120 V	Required Tools	Additional Recommended Tools
3000	70904687	Main PCB General Purpose 120V / 230V vent.	X	X	8mm socket wrench	4mm Allen
3010	20210445	Fan	X			
3020	20180745	Panel Plug 120V / 230V 10A	X	X		
3030	20180747	Overcurrent Switch	X	X		
3040	20160746	Brake Resistor 120Ω	X	X	4mm Allen	
3100	70902026	AutoLock	X	X	3mm Allen	AutoLock Tool Kit
3200	20210429	Motor GP	X	X	13mm socket wrench	AutoLock Tool kit, 4mm Allen
3400	20150270	Sensor Cap	X	X	4mm Allen	
3500	70902692	Lid Latch	X	X	AutoLock Tool kit	
3610	20190300	Line in cord 120V		X		
3620	20190246	Line in cord 230V	X			
3630	50120065	Latch wire	X	X		
3640	50120463	Display wire	X	X		
3650	50120066	Keypad Overlay wire	X	X		
3660	20058639	EBM-Fan wire	X	X		
3670	50120160	Compressor wire	X	X		
Not shown	70904676	Rear Panel	X	X		

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# Spare Parts NV-RAM

Pos.	Part Nr.:	Description:	Catalog Number:	230V	120V	100V	Required Tools	Additional Recommended Tools
3700	70904671	Thermo Scientific Multifuge X1R	75004250	X			Chip removal tool or small screwdriver	4mm Allen
	70904671	Sorvall Legend X1R	75004260	X				
	70904667	Thermo Scientific Megafuge 16R	75004270	X				
	70904667	Sorvall ST 16R	75004380	X				
	70904667	Thermo Scientific SL 16R	75004030	X				
	70904670	Thermo Scientific Multifuge X1R	75004251		X			
	70904670	Sorvall Legend X1R	75004261		X			
	70904666	Thermo Scientific Megafuge 16R	75004271		X			
	70904666	Sorvall ST 16R	75004381		X			
	70904666	Thermo Scientific SL 16R	75004031		X			
	70904681	Sorvall Legend X1R	75004263			X		
	70904679	Sorvall ST 16R	75004383			X		

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**Refrigerated Units:** Multifuge X1R – Series / Megafuge 16R – series / Legend X1R – series / ST16R – series / SL16R - series

# Service Kits



Pos. 4000

**Pos. 4000:**  
Without gas lid stay. Please order separately, refer to [bulletin 1401-CEN-OHA-0544](#) for more information.  
New gas lid stay: 50143277

**Pos. 4500:**  
With instruction number 50119249.  
Tool kit includes parts that make it easier to:

- Remove the AutoLock
- Check function of the AutoLock
- Do a rotor emergency release
- Change anti-vibration mounts

Pos. 4500



Pos. 4100

**Pos. 4100:**  
Refer to bulletin 1808-CEN-OHA-0653.

Pos. 4600

**Pos. 4600:**  
All GP1 centrifuges with SN: 41622041 and higher have a new gas lid stay (see section „Lid“)



Pos.	Part Nr.:	Description:	Multi X1	Mega 16	Legend X1	ST 16	SL 16	Required Tools	Additional Recommended Tools
4000	70904682	Service Kit anti - vibration mounts	X	X	X	X	X	13mm socket wrench / jaw wrench	4mm Allen
4100	50157507	Sensor Cap Motor Cover Kit GP	<b>230V / 120V / 100V</b>						
4500	70904693	Tool Kit AutoLock	X	X	X	X	X		
4600	70900138	Service Kit New Gas Lid Stay	X	X	X	X	X		

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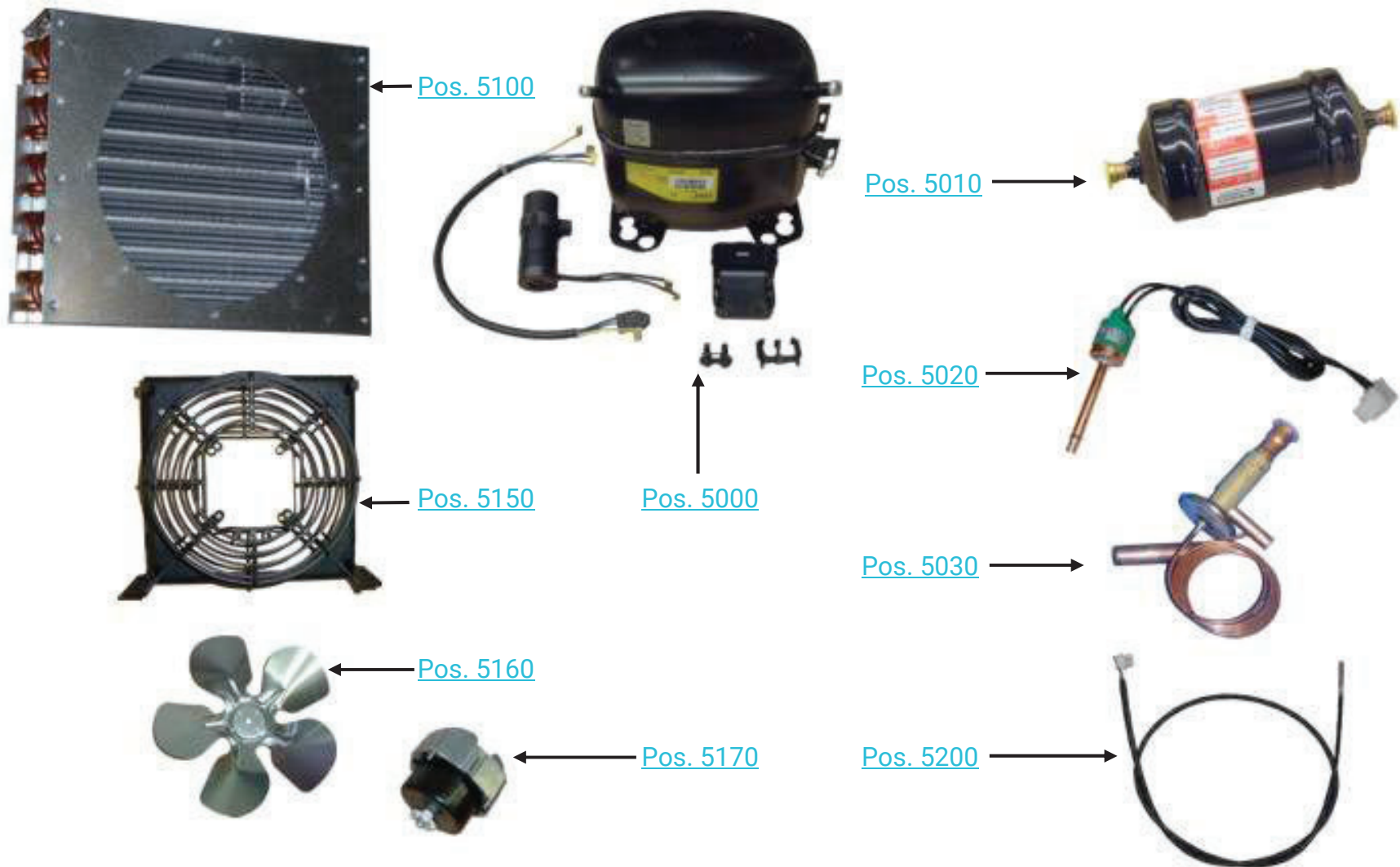
# Cooling System 100V / 120V (no changes due to f-gas)



# Spare Parts Cooling System 100V / 120V

Pos.	Part Nr.:	Description:	120V	100V	Required Tools	Additional Recommended Tools
5000	20240654	Compressor 60Hz 134a	X	X		
5010	20240577	Liquid Dryer	X	X		
5020	50116522	Overpressure switch 134a	X	X		
5030	20240656	Expansion valve 134a	X	X		
5100	20058497	Condenser	X	X		
5150	20058641	Fan frame	X	X		
5160	20058638	Fan blade	X	X		
5170	20058637	Fan Motor 115V	X	X		
5200	50116267	Temperature sensor	X	X		

# Cooling System 230V (refer to serial number cut)



# Spare Parts Cooling System 230V

Pos.	Part Nr.:	Description:	230V
<b>Units produced prior &amp; with serial number 42579909 used refrigerant R404a.</b>			
5000	20240655	Compressor 50Hz 404a	X
5010	20240577	Liquid Dryer	X
5020	50120380	Overpressure switch 404a	X
5030	20240671	Expansion valve 404a	X
5100	20058497	Condenser	X
5150	20058641	Fan frame	X
5160	20058638	Fan blade	X
5170	20058498	Fan Motor 230V	X
5200	50116267	Temperature sensor	X
<b>Units produced prior &amp; with serial number 42579910 used refrigerant R134a due to f-gas regulations.</b>			
5000	20240674	Compressor 50 / 60Hz 134a	X
5010	20240577	Liquid Dryer	X
5020	50116522	Overpressure switch 134a	X
5030	20240656	Expansion valve 134a	X
5100	20058497	Condenser	X
5150	20058641	Fan frame	X
5160	20058638	Fan blade	X
5170	20058637	Fan Motor 120V	X
5200	50116267	Temperature sensor	X



Take care which refrigeration system is inside and take this and the serial number cut as basis to order new spare parts.  
 An **old** system needs also **old** spare parts but **recycled refrigerant** which is written down on the nameplate.  
 A **new** system needs **new** spare parts and **refrigerant** which is written down on the nameplate.

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**Refrigerated Units:** Multifuge X1R – Series / Megafuge 16R – series / Legend X1R – series / ST16R – series / SL16R - series