



## Model:ZBM Series

Describing:

### TECHNICAL DATA OF ZBM SERIES OF R600a COMPRESSORS

Model	Disol.[ml]	Cooling type	Motor type	Oil charge [ml]	Vollage /frequency[V/Hz]	Evaporating Temperature							
						-30℃	-25℃	-23.3℃			-20℃	-15℃	-10℃
						WOUT	WOUT	I[A]	WOUT[W]	COP[W/W]	WOUT	WOUT	WOUT
ZBM1110CY	7.40	S	RSIR	340	200-220/50			0.62	116	1.30			
ZBM1111CY	8.10	S	RSIR	340	200-220/50			0.68	125	1.32			
ZBM1112CY	8.90	S	RSIR	340	200-220/50			0.75	140	1.34			
ZBM1114CY	9.93	S	RSIR	340	200-220/50			0.85	160	1.35			
ZBM1116CY	11.02	S	RSIR	340	200-220/50			0.88	180	1.35			
ZBM1118CY	12.30	S	RSIR	340	200-220/50			0.96	200	1.37			

Test conditions

Condensing temperature:54.4℃

Subcooling temperature:32.2℃

Suction temperature:32.2℃

Ambient temperature:32.2℃

### TECHNICAL DATA OF PTC STARTING RELAY AND OVERLOAD PROTECTOR

Model	Starting relay					OVER LOAD PROTECTOR						
						Model	Open temperature [℃]	Close temperature [℃]	Max current [A]	The current of time characteristic [25℃]		
	Model	Resis-tance [Ω]	Opera-tion time [S]	Reset time [S]	Power consu-mption [W]					Check current [A]	Open time [S]	Close time [S]
ZBM1110CY	QP2-12/X	12 <sup>+4</sup> <sub>-3</sub>	>0.6	≤100	≤3.5	B50-120/X	120±5	61±9	11.5	5.0	7.5-14	80-150
ZBM1111CY	QP2-12/X	12 <sup>+4</sup> <sub>-3</sub>	>0.6	≤100	≤3.5	B51-120/X	120±5	61±9	10.1	5.1	7.5-14	80-150
ZBM1112CY	QP2-12/X	12 <sup>+4</sup> <sub>-3</sub>	>0.6	≤100	≤3.5	B52-120/X	120±5	61±9	9.5	5.2	7.5-14	80-150
ZBM1114CY	QP2-12/X	12 <sup>+4</sup> <sub>-3</sub>	>0.6	≤100	≤3.5	B62-115/X	115±5	61±9	12	6.2	7.5-14	80-150
ZBM1116CY	QP2-12/X	12 <sup>+4</sup> <sub>-3</sub>	>0.6	≤100	≤3.5	B60-120/X	120±5	61±9	12	6.0	7.5-14	80-150
ZBM1118CY	QP2-12/X	12 <sup>+4</sup> <sub>-3</sub>	>0.6	≤100	≤3.5	B67-120/X	120±5	61±9	12	6.7	7.5-14	80-150

NOTE:The first letter "Z" of ZBM represents compressor with seat-spring



## Model:ZBK Series

Describing:

### TECHNICAL DATA OF ZBK SERIES OF R600a COMPRESSORS

Model	Displ. [ml]	Cooling type	Motor type	Run capacitor	Oil charge [ml]	Voltage /frequency [V/Hz]	Evaporating Temperature							
							-30℃	-25℃	-23.3℃			-20℃	-15℃	-10℃
							Wout [W]	Wout [W]	I [A]	Wout [W]	COP [W/W]	Wout [W]	Wout [W]	Wout [W]
ZBK1110CY	7.40	S	RSCR	4	340	200-220/50			0.42	118	1.42			
ZBK1111CY	8.10	S	RSCR	4.5	340	200-220/50			0.45	127	1.45			
ZBK1112CY	8.90	S	RSCR	4.5	340	200-220/50			0.50	142	1.48			
ZBK1114CY	9.93	S	RSCR	5	340	200-220/50			0.55	163	1.50			
ZBK1116CY	11.02	S	RSCR	5	340	200-220/50			0.60	182	1.50			
ZBK1118CY	12.30	S	RSCR	5	340	200-220/50			0.65	204	1.52			

Test conditions

Condensing temperature:54.4℃

Subcooling temperature:32.2℃

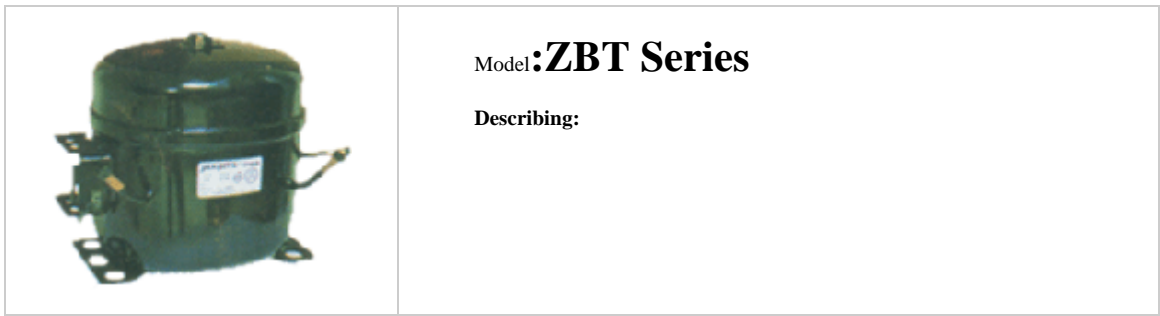
Suction temperature:32.2℃

Ambient temperature:32.2℃

### TECHNICAL DATA OF PTC STARTING RELAY AND OVERLOAD PROTECTOR

Model	Starting relay					OVER LOAD PROTECTOR						
						Model	Open temperature [℃]	Close temperature [℃]	Max current [A]	The current of time characteristic [25℃]		
	Model	Resistance at 25℃ [Ω]	Operating time [S]	Reset time [S]	Power consumption [W]					Check current [A]	Open time [S]	Close time [S]
ZBK1110CY	QP2-12/X3	12 <sup>+4</sup> <sub>-3</sub>	>0.6	≤100	≤3.5	B40-120/X	120±5	61±9	10	4.0	7.5-14	80-150
ZBK1111CY	QP2-12/X3	12 <sup>+4</sup> <sub>-3</sub>	>0.6	≤100	≤3.5	B40-120/X	120±5	61±9	10	4.0	7.5-14	80-150
ZBK1112CY	QP2-12/X3	12 <sup>+4</sup> <sub>-3</sub>	>0.6	≤100	≤3.5	B45-108/X	108±5	61±9	10	4.5	7.5-14	80-150
ZBK1114CY	QP2-12/X3	12 <sup>+4</sup> <sub>-3</sub>	>0.6	≤100	≤3.5	B45-108/X	108±5	61±9	10	4.5	7.5-14	80-150
ZBK1116CY	QP2-12/X3	12 <sup>+4</sup> <sub>-3</sub>	>0.6	≤100	≤3.5	B58-115/X	115±5	61±9	10	5.8	7.5-14	80-150
ZBK1118CY	QP2-12/X3	12 <sup>+4</sup> <sub>-3</sub>	>0.6	≤100	≤3.5	B60-120/X	120±5	61±9	11.5	6.0	7.5-14	80-150

NOTE:The first letter "Z" of ZBk represents compressor with seat-spring



Model:**ZBT Series**

**Describing:**

**TECHNICAL DATA OF ZBU SERIES OF R600a SEAT-SPRING COMPRESSORS**

Model	Displ. [ml]	Cooling type	Motor type	Run capacitor	Oil charge [ml]	Voltage /frequency [V/Hz]	Evaporating Temperature							
							-30℃	-25℃	-23.3℃		-20℃	-15℃	-10℃	
							Wout [W]	Wout [W]	I [A]	Wout [W]	COP [W/W]	Wout [W]	Wout [W]	Wout [W]
ZBT1112CY	8.90	S	RSCR	5	350	200-220/50			0.48	148	1.56			
ZBT1114CY	9.93	S	RSCR	5	350	200-220/50			0.55	168	1.56			
ZBT1116CY	11.02	S	RSCR	5	350	200-220/50			0.62	188	1.56			

Test conditions

Condensing temperature:54.4℃

Subcooling temperature:32.2℃

Suction temperature:32.2℃

Ambient temperature:32.2℃

**TECHNICAL DATA OF PTC STARTING RELAY AND OVERLOAD PROTECTOR**

Model	Starting relay					OVER LOAD PROTECTOR						
						Model	Open temperature [℃]	Close temperature [℃]	Max current [A]	The current of time characteristic [25℃]		
	Model	Resistance at 25℃ [Ω]	Operating time [S]	Reset time [S]	Power consumption [W]					Check current [A]	Open time [S]	Close time [S]
ZBT1112CY	QP2-12/B	12 <sup>+4</sup> <sub>-3</sub>	>0.6	≤120	≤3.5	B52-120/B	120±5	61±9	10	5.2	7.5-14	80-150
ZBT1114CY	QP2-12/B	12 <sup>+4</sup> <sub>-3</sub>	>0.6	≤120	≤3.5	B45-108/B	108±5	61±9	10	4.5	7.5-14	80-150
ZBT1116CY	QP2-12/B	12 <sup>+4</sup> <sub>-3</sub>	>0.6	≤120	≤3.5	B58-115/B	115±5	61±9	11.5	5.8	7.5-14	80-150

NOTE:1.The first letter "Z" of ZBT represents compressor with seat-spring

2.The external view dimensions and of ZBT series are the same as ZBM and ZBK series



## Model:ZBU Series

Describing:

### TECHNICAL DATA OF ZBU SERIES OF R600a SEAT-SPRING COMPRESSORS

Model	Displ. [cm <sup>3</sup> ]	Cooling type	Motor type	Run capacitor	Oil charge [ml]	Voltage /frequency [V/Hz]	Evaporating Temperature							
							-30℃	-25℃	-23.3℃			-20℃	-15℃	-10℃
							Wout [W]	Wout [W]	I [A]	Wout [W]	COP [W/W]	Wout [W]	Wout [W]	Wout [W]
ZBU1112CY	8.90	S	RSCR	5	320	200-220/5			0.48	152	1.62			
ZBU1114CY	9.93	S	RSCR	5	320	200-220/5			0.52	172	1.62			
ZBU1116CY	11.02	S	RSCR	5	320	200-220/5			0.60	195	1.62			

Test conditions

Condensing temperature:54.4℃

Subcooling temperature:32.2℃

Suction temperature:32.2℃

Ambient temperature:32.2℃

### TECHNICAL DATA OF PTC STARTING RELAY AND OVERLOAD PROTECTOR

Model	Starting relay					OVER LOAD PROTECTOR						
						Model	Open temperature [℃]	Close temperature [℃]	Max current [A]	The current of time characteristic [25℃]		
	Model	Resistance at 25℃ [Ω]	Operating time [S]	Reset time [S]	Power consumption [W]					Check current [A]	Open time [S]	Close time [S]
ZBU1112CY	QP2-12/B	12 <sup>+4</sup> <sub>-3</sub>	>0.6	≤120	≤3.5	B52-120/B	120±5	61±9	10	5.2	7.5-14	80-150
ZBU1114CY	QP2-12/B	12 <sup>+4</sup> <sub>-3</sub>	>0.6	≤120	≤3.5	B45-108/B	108±5	61±9	10	4.5	7.5-14	80-150
ZBU1116CY	QP2-12/B	12 <sup>+4</sup> <sub>-3</sub>	>0.6	≤120	≤3.5	B58-115/B	115±5	61±9	11.5	5.8	7.5-14	80-150

NOTE:1.The first letter "Z" of ZBU represents compressor with seat-spring

2.The external view dimensions and of ZBU series are the same as ZBM and ZBK series



## Model:ZBS Series

Describing:

### TECHNICAL DATA OF ZBS SERIES OF R600a SEAT-SPRING COMPRESSORS

Model	Displ. [cm <sup>3</sup> ]	Cooling type	Motor type	Run capacitor	Oil charge [ml]	Voltage /frequency [V/Hz]	Evaporating Temperature							
							-30℃	-25℃	-23.3℃		-20℃	-15℃	-10℃	
							Wout [W]	Wout [W]	I [A]	Wout [W]	COP [W/W]	Wout [W]	Wout [W]	Wout [W]
ZBS1112CY	8.90	S	RSCR	5	320	200-220/5			0.46	152	1.62			
ZBS1114CY	9.93	S	RSCR	5	320	200-220/5			0.52	172	1.62			
ZBS1116CY	11.02	S	RSCR	5	320	200-220/5			0.60	195	1.62			

Test conditions

Condensing temperature:54.4℃

Subcooling temperature:32.2℃

Suction temperature:32.2℃

Ambient temperature:32.2℃

### TECHNICAL DATA OF PTC STARTING RELAY AND OVERLOAD PROTECTOR

Model	Starting relay					OVER LOAD PROTECTOR						
						Model	Open temperature [℃]	Close temperature [℃]	Max current [A]	The current of time characteristic [25℃]		
	Model	Resistance at 25℃ [Ω]	Operating time [S]	Reset time [S]	Power consumption [W]					Check current [A]	Open time [S]	Close time [S]
ZBS1112CY	QP2-12/B	12 <sup>+4</sup> <sub>-3</sub>	>0.6	≤120	≤3.5	B52-120/B	120±5	61±9	10	5.2	7.5-14	80-150
ZBS1114CY	QP2-12/B	12 <sup>+4</sup> <sub>-3</sub>	>0.6	≤120	≤3.5	B45-108/B	108±5	61±9	10	4.5	7.5-14	80-150
ZBS1116CY	QP2-12/B	12 <sup>+4</sup> <sub>-3</sub>	>0.6	≤120	≤3.5	B58-115/B	115±5	61±9	11.5	5.8	7.5-14	80-150

NOTE:1.The first letter "Z" of ZBS represents compressor with seat-spring

2.The external view dimensions and of ZBS series are the same as ZBM and ZBK series