

**ACEBOCK®**



## **Semi-Hermetic Reciprocating Compressor**

**ACEBOCK Semi-Hermetic Reciprocating Compressors** are designed for high-end refrigeration applications, offering:

- Outstanding technical performance
- Flexible application adaptability
- Industry-leading reliability

This series is engineered for **high efficiency, long lifespan, and easy maintenance**, making it ideal for:

- Industrial refrigeration
- Commercial cold storage
- Food processing
- Pharmaceutical & medical storage
- Logistics cooling chain systems

## WHY CHOOSE ACEBOCK?

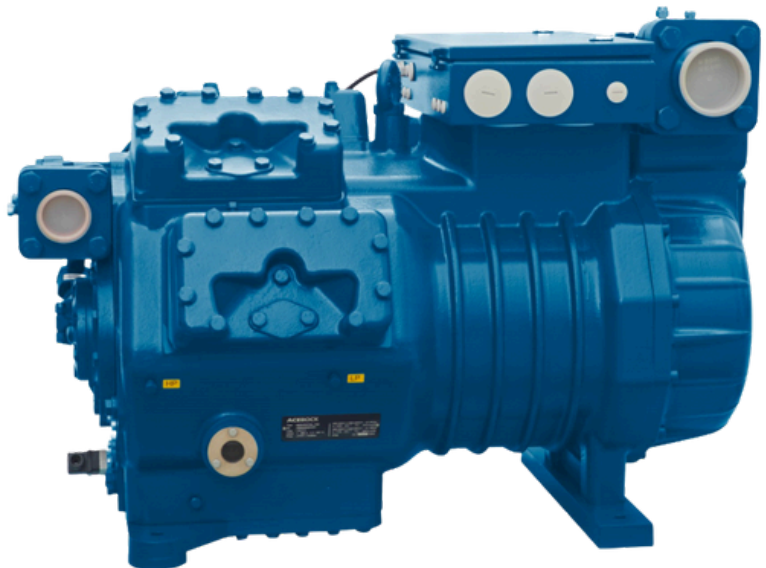
High Efficiency

Reliability

Easy maintenance

Modular design for flexibility

Durable construction for long-term use



**ACEBOCK** compressors are widely used in:

### Industrial Cooling

- Chemical Cooling
- Low-temperature reactors
- Large cold storage

### Commercial Cooling

- Food Processing
- Pharmaceutical storage
- Logistics hubs

### Special Environments

- Marine refrigeration
- High-altitude area
- High / Low temperature workshop

### Medical Applications

- Ultra-low temperature storage
- Blood banks
- Laboratories

## SHP SERIES SEMI-HERMETIC RECIPROCATING COMPRESSOR

**22SHP**



**34SHP**



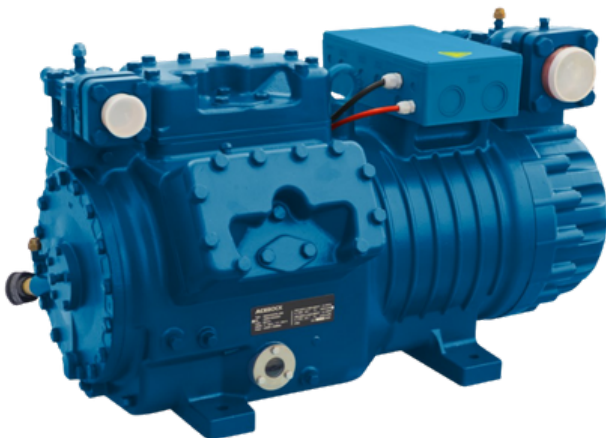
**44SHP**



**56SHP**



**66SHP**



**88SHP**



## KEY FEATURES & ADVANTAGES

### STEP CAPACITY CONTROL SYSTEM

- Fast response
- High reliability
- Multi-stage capacity control (10%-100%)
- Optimized for fluctuating load conditions

### FULL INVERTER COMPATIBILITY

- Full Inverter for all models
- Energy saving up to 35%
- Temperature control accuracy:  $\pm 0.5^{\circ}\text{C}$
- Ideal for precision environments (labs, medical storage)

### MULTI-REFRIGERANT COMPATIBILITY

- R404A/R507A, R134a, R448A/R449A
- R407C, R22
- Compliant with global environmental standards

### WIDE CAPACITY RANGE

- Range: 11.1 m<sup>3</sup>/h to 281.3 m<sup>3</sup>/h (50Hz)
- Suitable from small cold rooms to large industrial systems

### HIGH-EFFICIENCY LUBRICATION SYSTEM

- Ensures lubrication of moving parts
- Reduces wear and friction
- Extends compressor lifespan
- Stable operation under extreme conditions

### FORGED CORE COMPONENTS

- High-strength forged steel Crankshaft & Connecting rod
- Improved durability (+35% density vs casting)
- High resistance to fatigue and impact
- Stable performance in extreme conditions

### EASY MAINTENANCE MOTOR DESIGN

- Quick motor replacement on-site
- No need for heavy dismantling
- Reduced downtime
- Ideal for remote or urgent service scenarios

### DURABLE DESIGN

- Corrosion resistant
- High / Low temperature resistant
- Strong auxiliary structure
- Operating temperature range:  $-40^{\circ}\text{C}$  to  $+120^{\circ}\text{C}$

### ADVANCED MOTOR PROTECTION (INT69G)

- Motor temperature monitoring
- Discharge temperature monitoring
- Restart protection
- Reset function
- Supports up to 9 pcs PTC sensors

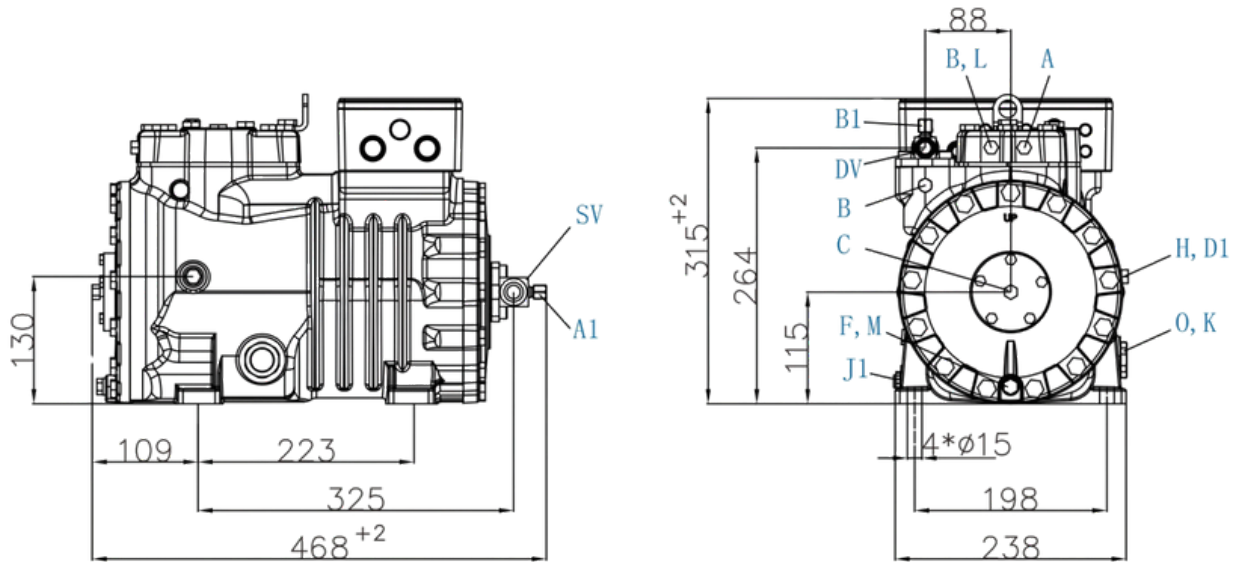
### RELIABLE ELECTRICAL TERMINAL DESIGN

- Silicone insulation protection
- Resistant to moisture, vibration, oil & corrosion
- Ensures safe and stable operation

## DIMENSIONS & CONNECTIONS

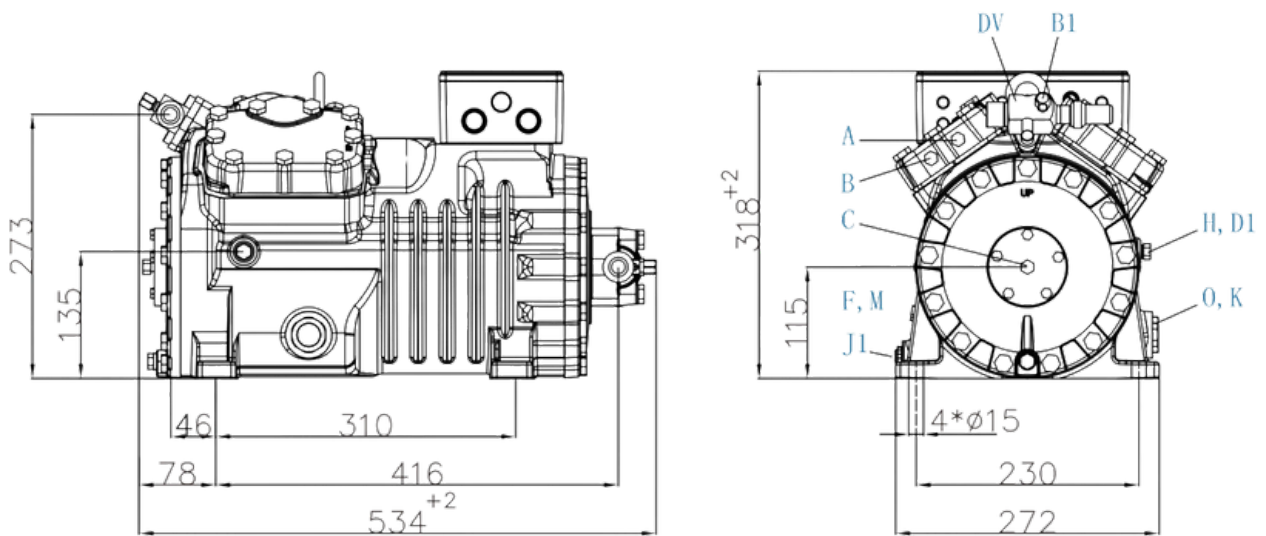
### 22SHP

>> 22SHP125L-2 >> 22SHP125H-3 >> 22SHP160L-2  
>> 22SHP160H-3 >> 22SHP190L-3 >> 22SHP190H-4



### 34SHP

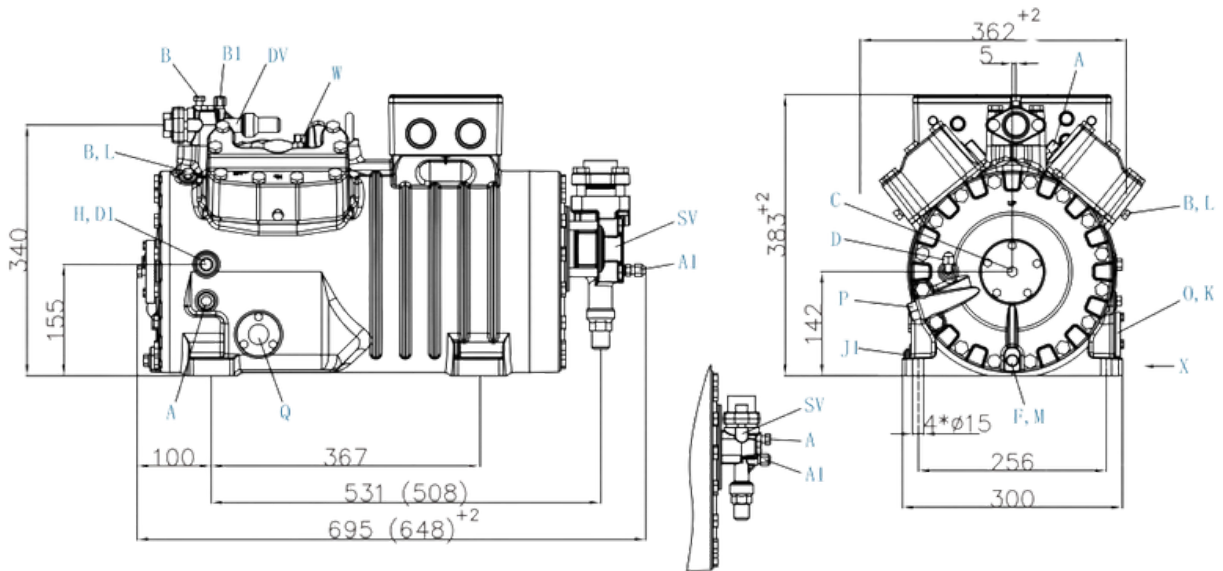
>> 34SHP215L-3 >> 34SHP215H-5 >> 34SHP255L-4 >> 34SHP255H-6  
>> 34SHP315L-5 >> 34SHP315H-7 >> 34SHP380L-6 >> 34SHP380H-9



## DIMENSIONS & CONNECTIONS

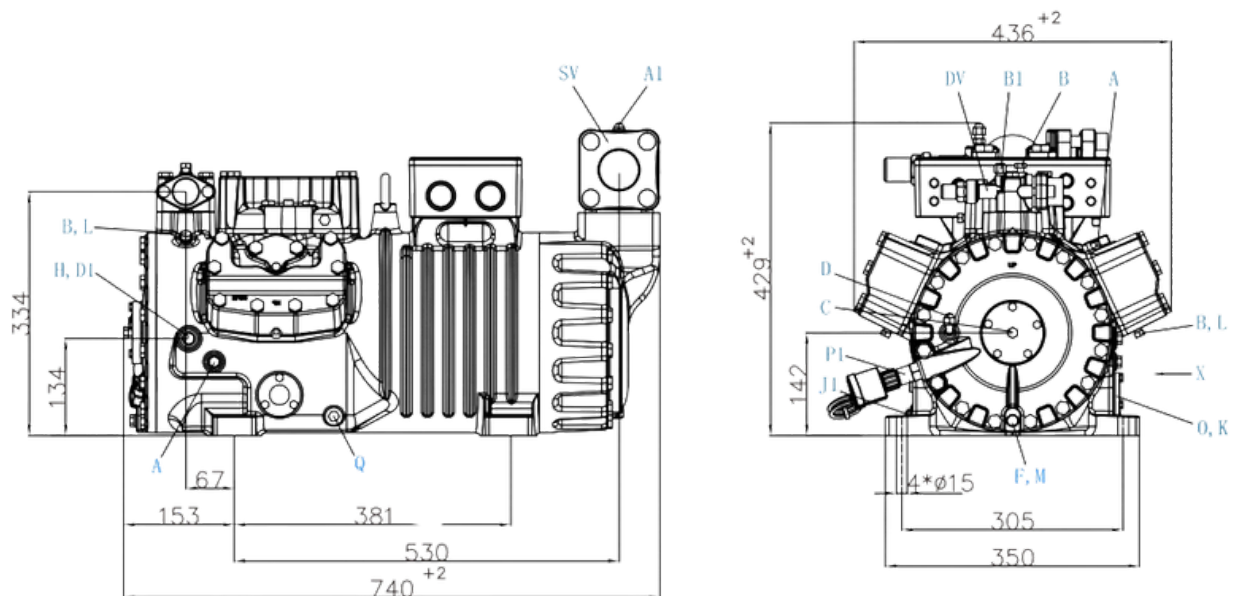
### 44SHP

>> 44SHP475L-9 >> 44SHP475H-12 >> 44SHP565L-12 >> 44SHP565H-15  
 >> 44SHP665L-14 >> 44SHP665H-20 >> 44SHP770L-15 >> 44SHP770H-22



### 56SHP

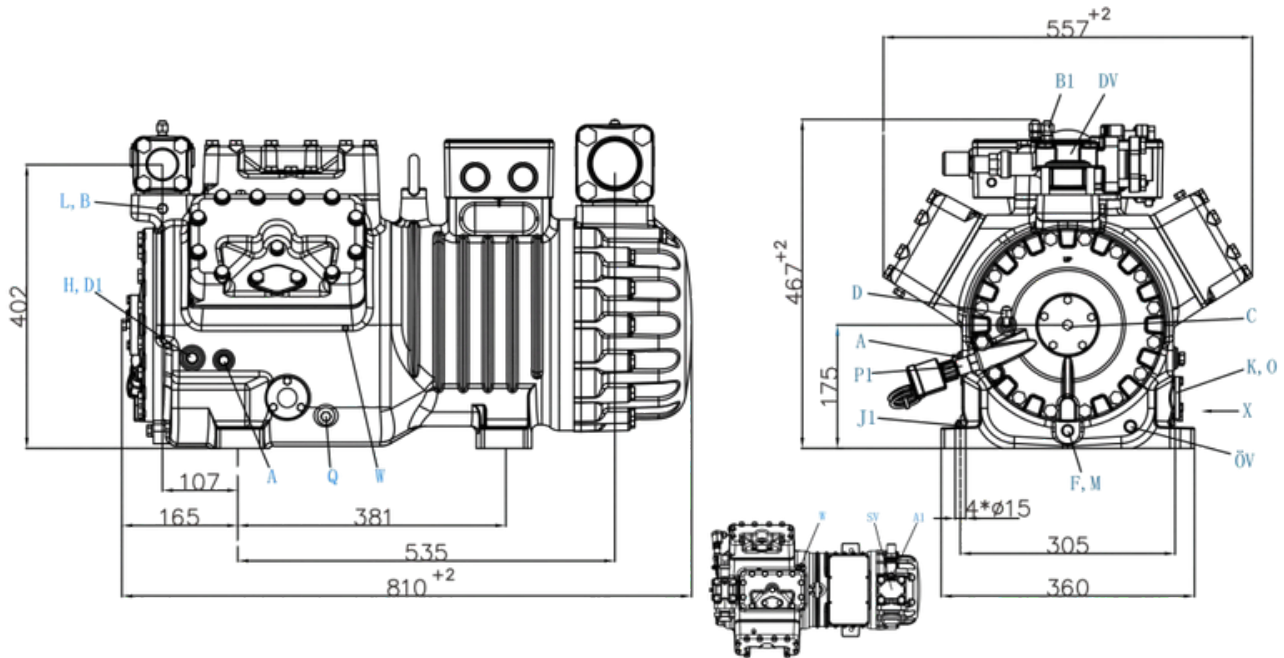
>> 56SHP850L-18 >> 56SHP850H-25 >> 56SHP995L-23  
 >> 56SHP995H-30 >> 56SHP1155L-28 >> 56SHP1155H-35



## DIMENSIONS & CONNECTIONS

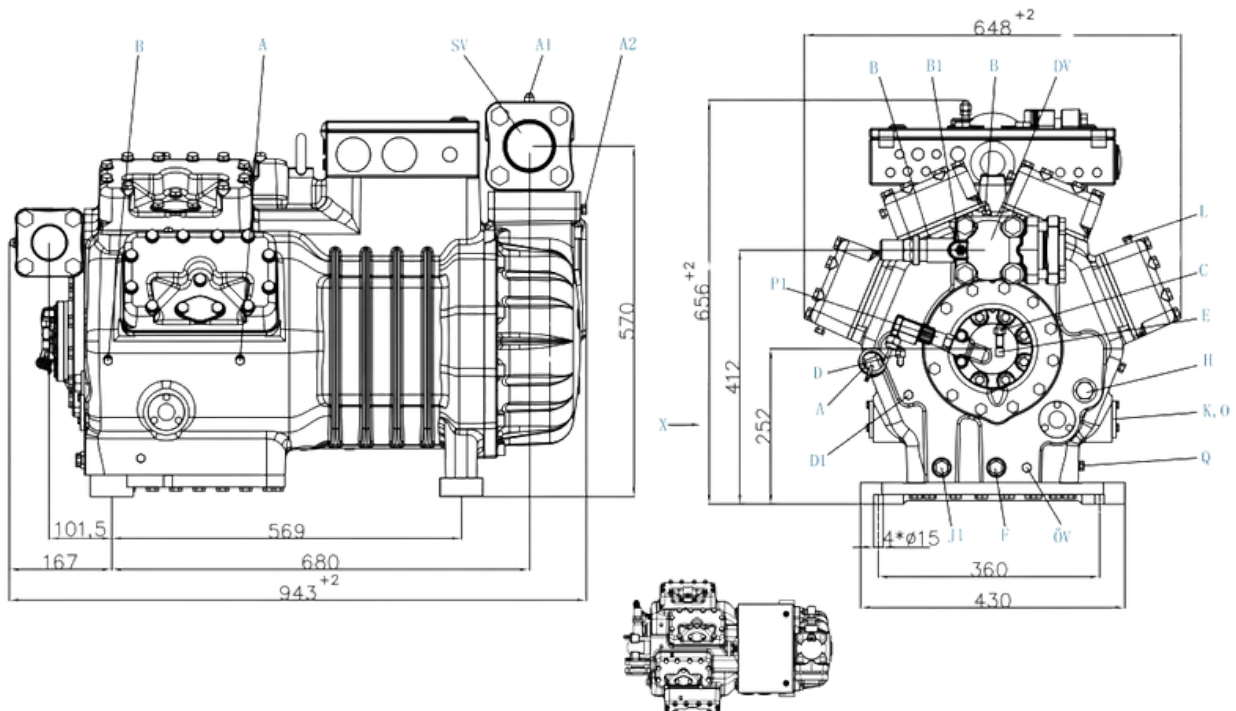
### 66SHP

>> 66SHP1340L-31 >> 66SHP1340H-37 >> 66SHP1540L-36 >> 66SHP1540H-42  
>> 66SHP1750L-44 >> 66SHP1750H-50 >> 66SHP2070L-50 >> 66SHP2070H-60



### 88SHP

>> 88SHP2400L-60 >> 88SHP2400H-70 >> 88SHP2735L-70  
>> 88SHP2735H-80 >> 88SHP3235L-80 >> 88SHP3235H-95



## DIMENSIONS & CONNECTIONS

Model	22SHP	34SHP	44SHP	56SHP	66SHP	88SHP
Semi-hermetic 2-cylinder reciprocating compressor, direct-on-line motor start: 220–240V Δ / 380–420V Y / 3 / 50 Hz 265–290V Δ / 440–480V Y / 3 / 60 Hz	•	-	-	-	-	-
Semi-hermetic 4-cylinder reciprocating compressor, direct-on-line motor start: 220–240V Δ / 380–420V Y / 3 / 50 Hz 265–290V Δ / 440–480V Y / 3 / 60 Hz	-	•	-	-	-	-
Semi-hermetic 4-cylinder reciprocating compressor, part-winding start (50% / 50%): 380–420V Y/YY / 3 / 50 Hz 440–480V Y/YY / 3 / 60 Hz	-	-	•	-	-	-
Semi-hermetic 6-cylinder reciprocating compressor, part-winding start (50% / 50%): 380–420V Y/YY / 3 / 50 Hz 440–480V Y/YY / 3 / 60 Hz	-	-	-	•	•	-
Semi-hermetic 8-cylinder reciprocating compressor, part-winding start (50% / 50%): 380–420V Y/YY / 3 / 50 Hz 440–480V Y/YY / 3 / 60 Hz	-	-	-	-	-	•
Motors for special voltages and/or frequencies available on request	o <sup>3</sup>	o <sup>3</sup>	o <sup>3</sup>	o <sup>3</sup>	o <sup>3</sup>	o <sup>3</sup>
Motor protection via PTC temperature sensors and motor protection module INT69G	•	•	•	•	•	•
Discharge overheat protection: PTC	o <sup>2</sup>	o <sup>2</sup>	o <sup>2</sup>	o <sup>2</sup>	o <sup>2</sup>	o <sup>2</sup>
Oil pump	•	•	•	•	•	•
Refrigeration Oil Charge :  (Model suffix "E"): Standard low-temperature application Charged with BOCKlub SZ55 refrigeration oil Ultra-low temperature application: Charged with BOCKlub SEZ32 refrigeration oil  Models without suffix "E": Charged with BOCKlub SP46 refrigeration oil	•	•	•	•	•	•
Charged with protective gas	•	•	•	•	•	•
Supplied with 4 vibration absorbers	o <sup>1</sup>	o <sup>1</sup>	o <sup>1</sup>	o <sup>1</sup>	o <sup>1</sup>	o <sup>1</sup>
Built-in safety valve	-	-	•	•	•	•
Suction and discharge shut-off valves	•	•	•	•	•	•
Sight Glass : 1 unit 3 units	•	•	•	•	•	-
Oil sump heater: 110–240V / 1 / 50–60 Hz, 50–120W PTC type, self-regulating	• <sup>2</sup>	• <sup>2</sup>	-	-	-	-
220–240V / 1 / 50–60 Hz, 160W	-	-	• <sup>2</sup>	• <sup>2</sup>	• <sup>2</sup>	-
220–240V / 1 / 50–60 Hz, 200W	-	-	-	-	-	• <sup>2</sup>
Rear bearing flange with reserved oil differential pressure sensor connection	-	-	• <sup>2</sup>	• <sup>2</sup>	• <sup>2</sup>	• <sup>2</sup>
Hydraulic Pressure Differential Sensor DELTA-PI220-240V-1-50/60 Hz	-	-	o <sup>1</sup>	• <sup>2</sup>	• <sup>2</sup>	• <sup>2</sup>
Oil pressure Safety switch 230V / 1 / 50–60 Hz, IP20, MP54	-	-	o <sup>1</sup>	o <sup>1</sup>	o <sup>1</sup>	o <sup>1</sup>
230V / 1 / 50–60 Hz, IP20, MP55	o <sup>1</sup>	o <sup>1</sup>	-	-	-	-
Oil Service Valve	-	-	-	-	o <sup>2</sup>	o <sup>2</sup>
Capacity regulator : 1 oil service valve : 50% Capacity Control	-	o <sup>3</sup>	o <sup>3</sup>	-	-	-
1–2 regulators: 66% / 33% capacity control	-	-	-	o <sup>3</sup>	o <sup>3</sup>	-
1–3 capacity regulators: 75% / 50% / 25% cooling capacity control	-	-	-	-	-	o <sup>3</sup>

<sup>1</sup> Individual parts <sup>2</sup> Pre-installed at compressor <sup>3</sup> Customized on request <sup>4</sup> Additional adapter required •Standard oOptional

## TECHNICAL SPECIFICATIONS

Model	Cyl. Qty	Discharge Flow Rate		Electrical Parameters						Weight	Connection Pipe				Oil Capacity	Frequency Range
				Power	Maximum Operation Current		Maximum Power Consumption	Locked Rotor Current			Discharge Pipe		Suction Pipe			
		m3/h			A			kW	A		kg					Ltr.
		50Hz 1450rpm	60Hz 1740rpm	Δ	Y	Δ	Y		mm	inch		mm	inch			
22SHP125L-2	2	11.10	13.30	3)	9.3	5.4	3.0	69	40	74.0	16	5/8	22	7/8	1.1	30-70
22SHP125H-3	2	11.10	13.30	3)	10.8	6.2	3.6	69	40	74.0	16	5/8	22	7/8	1.1	30-70
22SHP160L-2	2	13.70	16.40	3)	11.1	6.4	3.7	69	40	74.0	16	5/8	22	7/8	1.1	30-70
22SHP160H-3	2	13.70	16.40	3)	13.1	7.6	4.4	87	50	76.0	16	5/8	22	7/8	1.1	30-70
22SHP190L-3	2	16.50	19.80	3)	13.8	8.0	4.8	69	40	74.0	16	5/8	22	7/8	1.1	30-70
22SHP190H-4	2	16.50	19.80	3)	16.2	9.4	5.6	87	50	75.0	16	5/8	22	7/8	1.1	30-70
34SHP215L-3	4	18.80	22.60	3)	14.0	8.1	4.8	87	50	92.0	16	5/8	28	1 1/8	1.3	25-70
34SHP215H-5	4	18.80	22.60	3)	18.3	10.5	6.0	132	76	97.0	16	5/8	28	1 1/8	1.3	25-70
34SHP255L-4	4	22.10	26.60	3)	17.0	9.8	6.0	87	50	92.0	16	5/8	28	1 1/8	1.3	25-70
34SHP225H-6	4	22.10	26.60	3)	21.1	12.2	7.2	132	76	96.0	16	5/8	28	1 1/8	1.3	25-70
34SHP315L-5	4	27.30	32.80	3)	21.1	12.2	7.4	111	64	94.0	22	7/8	28	1 1/8	1.3	25-70
34SHP315H-7	4	27.30	32.80	3)	25.5	14.7	8.9	132	76	97.0	22	7/8	28	1 1/8	1.3	25-70
34SHP380L-6	4	33.10	39.70	3)	26.1	15.1	9.3	111	64	93.0	22	7/8	28	1 1/8	1.3	25-70
34SHP380H-9	4	33.10	39.70	3)	31.2	18.0	11.1	132	76	96.0	22	7/8	28	1 1/8	1.3	25-70
44SHP475L-9	4	41.30	49.60	4)	PW 1+2*		11.0	PW1/PW1+2*		164.0	28	1 1/8	35	1 3/8	2.7	25-70
44SHP475H-12	4	41.30	49.60	4)	19.0	23.0		83	109							
44SHP565L-12	4	49.20	59.00	4)	22.0	22.0		115	150							
44SHP565H-15	4	49.20	59.00	4)	26.0	26.0		83	109							
44SHP665L-14	4	57.70	69.20	4)	26.0	26.0		133	171							
44SHP665H-20	4	57.70	69.20	4)	26.0	26.0		115	150							
44SHP770L-15	4	67.00	80.40	4)	30.0	30.0		133	171							
44SHP770H-22	4	67.00	80.40	4)	30.0	30.0		133	171							
44SHP770H-22	4	67.00	80.40	4)	35.0	35.0	21.4	133	171	168.0	28	1 1/8	42	1 5/8	2.7	25-70
56SHP850L-18	6	73.80	88.60	4)	32.6	32.6	19.7	133	171	194.3	28	1 1/8	42	1 5/8	3.2	25-70
56SHP850H-25	6	73.80	88.60	4)	39.4	39.4	23.5	162	210	211.1	28	1 1/8	54	2 1/8	3.2	25-70
56SHP995L-23	6	86.60	103.90	4)	38.9	38.9	23.2	162	210	194.3	28	1 1/8	54	2 1/8	3.2	25-70
56SHP995H-30	6	86.60	103.90	4)	46.4	46.4	27.7	189	246	211.3	28	1 1/8	54	2 1/8	3.2	25-70
56SHP1155L-28	6	100.40	120.50	4)	46.9	46.9	28.0	189	246	211.8	35	1 3/8	54	2 1/8	3.2	25-70
56SHP1155H-35	6	100.40	120.50	4)	58.3	58.3	33.3	253	330	220.6	35	1 3/8	54	2 1/8	3.2	25-70
66SHP1340L-31	6	116.50	139.80	4)	53.7	53.7	31.9	170	275	282.0	35	1 3/8	54	2 1/8	4.4	25-60
66SHP1340H-37	6	116.50	139.80	4)	65.3	65.3	38.1	196	335	287.0	35	1 3/8	54	2 1/8	4.4	25-60
66SHP1540L-36	6	133.80	160.50	4)	62.1	62.1	37.2	170	275	280.0	35	1 3/8	54	2 1/8	4.4	25-60
66SHP1540H-42	6	133.80	160.50	4)	75.0	75.0	44.4	196	335	285.0	35	1 3/8	54	2 1/8	4.4	25-60
66SHP1750L-44	6	152.20	182.60	4)	71.9	71.9	42.4	196	335	280.0	42	1 5/8	54	2 1/8	4.4	25-60
66SHP1750H-50	6	152.20	182.60	4)	86.8	86.8	50.7	222	361	282.0	42	1 5/8	54	2 1/8	4.4	25-60
66SHP2070L-50	6	180.00	216.00	4)	85.1	85.1	50.7	196	335	276.0	42	1 5/8	64	2 5/8	4.4	25-60
66SHP2070H-60	6	180.00	216.00	4)	103.0	103.0	60.7	222	361	278.0	42	1 5/8	64	2 5/8	4.4	25-60
88SHP2400L-60	8	209.10	250.90	4)	101.0	101.0	59.5	298	438	452.0	54	2 1/8	76	3 1/8	9.6	25-60
88SHP2400H-70	8	209.10	250.90	4)	120.0	120.0	69.8	447	657	452.0	54	2 1/8	76	3 1/8	9.6	25-60
88SHP2735L-70	8	237.90	285.50	4)	116.0	116.0	67.1	386	567	455.0	54	2 1/8	76	3 1/8	9.6	25-60
88SHP2735H-80	8	237.90	285.50	4)	136.0	136.0	80.0	447	657	464.0	54	2 1/8	76	3 1/8	9.6	25-60
88SHP3235L-80	8	281.30	337.60	4)	135.0	135.0	79.2	447	657	459.0	54	2 1/8	76	3 1/8	9.6	25-60
88SHP3235H-95	8	281.30	337.60	4)	162.0	162.0	93.9	538	791	467.0	54	2 1/8	76	3 1/8	9.6	25-60

ACEBOCK reserves the right to change the design, technical specifications & dimensions without prior notice.  
Photo for illustration purposes only.

## TECHNICAL NOTES

- 1) The permissible tolerance of the above nominal voltage is **±10%**.
  - > Motors with other nominal voltages and currents can be provided upon customer request.
- 2) • The maximum power in the technical data applies to operation at 50 Hz.
  - > For operation at 60 Hz, the maximum power value can be multiplied by 1.2, while the maximum operating current remains unchanged.
  - When selecting contactors, cables, and fuses, please refer to the compressor's maximum operating current and maximum power consumption.
- 3) 220–240V  $\Delta$  / 380–420V Y / 3 / 50 Hz  
265–290V  $\Delta$  / 440–480V Y / 3 / 60 Hz
- 4) PW – Part-winding motor. Start method: part- winding start (no start unloading device required).
  - Winding ratio: > 44SHP, 56SHP, 66SHP, 88SHP – 50% / 50%
  - > Y/ $\Delta$  type motors can be provided upon customer request.
- 5) Suitable for brazed connections.

### **OIL SUMP HEATER : 110–240V / 1 / 50–60 Hz**

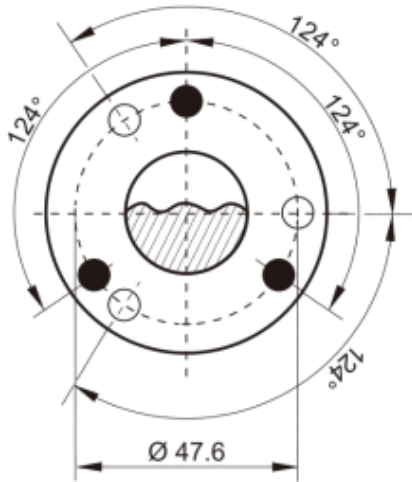
- > 22SHP, 34SHP: 50–120W
- > PTC type heater, self-regulating, installed in the compressor housing oil sump sleeve.

### **OIL SUMP HEATER : 230V / 1 / 50–60 Hz**

- > 44SHP, 56SHP, 66SHP: 160W, installed in the compressor housing oil sump sleeve
- > 88SHP: 200W, immersion type installed in the oil sump sleeve
- > Constant power type heater.

## APPENDIX

### X- Direction Dimensions



Connectable to Oil Level Controller

44SHP 56SHP 66SHP 88SHP

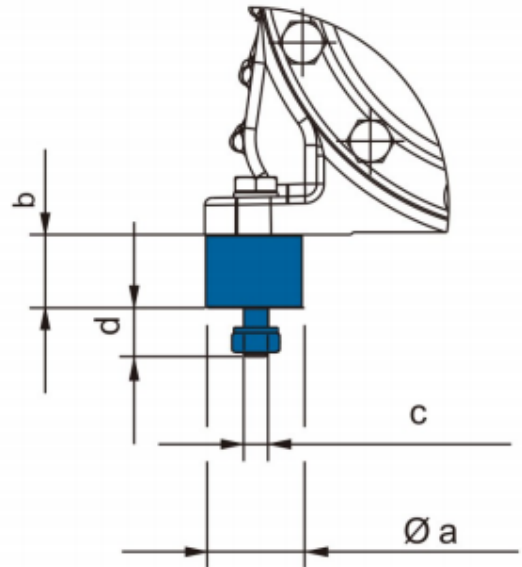
- The 3 holes position can be used to connect an oil level controller  
Brand ESK, AC+R CARLY (3 x M6 x 10 Depth)
- The 3 holes position can be used to connect an oil level controller  
Brand TRAXOIL (3 x M6 x 10 Depth)

Dimension in mm

### Dimensions of the Vibration Pad

Model	Ø a	b	c	d
22SHP	40	30	M10	20
34SHP	40	30	M10	20
44SHP	50	30	M12	25
56SHP	50	30	M12	25
66SHP	70	45	M12	37
88SHP	70	45	M12	37

Dimensions in mm



## ACCESSORIES

CONNECTIONS		22SHP	34SHP	44SHP	56SHP	66SHP	88SHP
SV	Suction Pipe	Please refer to the Technical Specifications					
DV	Discharge Pipe						
A	Suction Side Fitting (Non-Shutable)	1/8" NPTF	1/8" NPTF	1/8" NPTF	1/8" NPTF	1/8" NPTF	1/8" NPTF
A1	Suction Side Fitting (Shutable)	7/16" UNF	7/16" UNF	7/16" UNF	7/16" UNF	7/16" UNF	7/16" UNF
A2	Suction Side Fitting (Non-Shutable)	-	-	-	-	-	1/4" NPTF
B	Discharge Side Fitting (Non-Shutable)	1/8" NPTF	1/8" NPTF	1/8" NPTF	1/8" NPTF	1/8" NPTF	1/8" NPTF
B1	Discharge Side Fitting (Shutable)	7/16" UNF	7/16" UNF	7/16" UNF	7/16" UNF	7/16" UNF	7/16" UNF
C	High-Pressure Side Fitting (OIL)	1/8" NPTF	1/8" NPTF	1/8" NPTF	1/8" NPTF	1/8" NPTF	7/16" UNF
D	Low-Pressure Side Fitting (LP)	-	-	7/16" UNF	7/16" UNF	7/16" UNF	7/16" UNF
D1	Oil Separator Return Fitting	1/4" NPTF	1/4" NPTF	1/4" NPTF	1/4" NPTF	1/4" NPTF	1/4" NPTF
F	Drain Plug	M12 x1.5	M12 x1.5	M12 x1.5	M12 x1.5	M12 x1.5	M22 x1.5
H	Oil Filling Plug	1/4" NPTF	1/4" NPTF	1/4" NPTF	1/4" NPTF	1/4" NPTF	M22 x1.5
J1	Oil Sump Heater	3/8" NPTF	3/8" NPTF	3/8" NPTF	3/8" NPTF	3/8" NPTF	M22 x1.5
K	Sight Glass	1 1/8"-18 UNEF	1 1/8"-18 UNEF	3 Holes M6	3 Holes M6	3 Holes M6	3 Holes M6
L	Overheat Protection Thermostat Fitting	1/8" NPTF	1/8" NPTF	1/8" NPTF	1/8" NPTF	1/8" NPTF	1/8" NPTF
M	Oil Filter	M12 x1.5	M12 x1.5	M12 x1.5	M12 x1.5	M12 x1.5	M22 x1.5
O	Oil Level Controller Fitting	1 1/8"-18 UNEF	1 1/8"-18 UNEF	Please refer to the Appendix			
ÖV	Oil Maintenance Port Fitting	-	-	-	-	1/4" NPTF	1/4" NPTF
P	Oil Differential Pressure Sensor Fitting	-	-	M20 x1.5	M20 x1.5	M20 x1.5	M20 x1.5
Q	Oil Temperature Sensor Fitting	-	-	1/8" NPTF	1/8" NPTF	1/8" NPTF	1/8" NPTF
W	Liquid Injection Fitting	-	1/8" NPTF	1/8" NPTF	2 1/8" NPTF	2 1/8" NPTF	-

## ACEBOCK Compressor Selective BOCKLub Oil



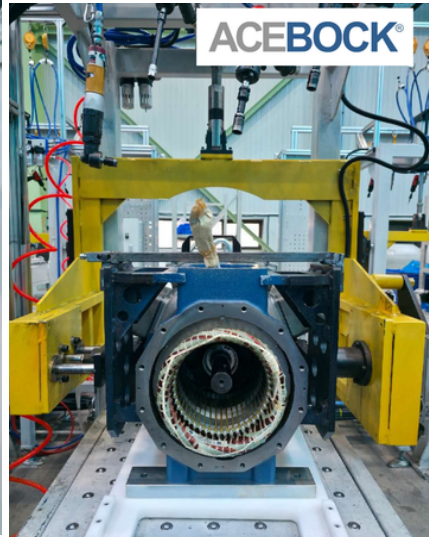
GERMANY: Bock GmbH has launched a range of oils specifically formulated for use with mobile and stationary Bock compressors in all applications using “natural” and synthetic refrigerants.

The new BOCKlub compressor oil series are said to have been formulated to permanently guarantee the economic efficiency and performance of its compressors. Bock considers that specifically formulated oils that are regularly tested and validated for new requirements and applications are important to achieving this.

Tailor-made for a wide range of applications – from low temperature to heat pump – the BOCKlub compressor oil series are said to guarantee a high level of wear protection and an increase in the efficiency and service life of the compressor.

Bock also claims excellent viscosity and temperature behaviour, high chemical and thermal stability and an easy upgrade from previously used oils.

## FACTORY AND PRODUCTION LINE



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