

FASCOld™



SK

SEMI-hermetic compressors
for CO₂ sub-critical applications



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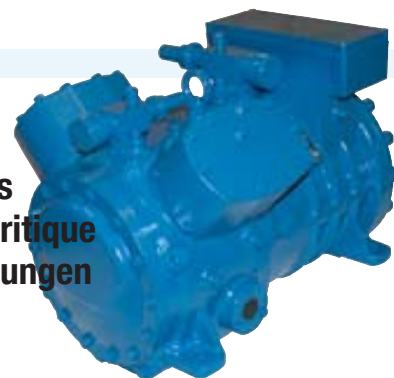
SK

Compressori semiermetici per R744 (CO₂), ciclo subcritico

Semi-hermetic compressors for R744 (CO₂), sub-critical applications

Compresseurs semi-hermétiques pour R744 (CO₂), systèmes sous-critique

Halbhermetische Verdichter für R744 (CO₂), unterkritischen Anwendungen



Una nuova serie di compressori per applicazioni con CO₂ in impianti subcritici in cascata

I dettagliati studi condotti presso il laboratorio FRASCOLD si sono concretizzati nei compressori semiermetici monostadio serie SK, capaci di operare con refrigerante CO₂ in condizioni subcritiche.

La progettazione ha tenuto in considerazione tutti gli elementi caratteristici dell'impiego con CO₂ e ha trovato soluzioni innovative per garantire il perfetto funzionamento in ogni punto del campo di impiego ammesso.

Caratteristiche salienti

- progetto generale ottimizzato per sopportare le elevate pressioni sia di lavoro che statiche
- nuovi motori elettrici ad alta efficienza
- piastre valvole di nuova progettazione
- lubrificante POE specifico per CO₂
- ampio campo di impiego

La dotazione standard

I compressori sono forniti completi di valvola di sicurezza interna (taratura 28 bar), rubinetti di aspirazione e compressione (attacchi a saldare), supporti antivibranti in gomma, carica olio lubrificante, carica di azoto (1 bar) per preservarli dalla umidità, indicatore di livello olio, dispositivi di protezione.

Tutti i modelli sono verniciati con uno strato di protettivo antiruggine e uno strato di smalto blu.

Motori elettrici

L'intera gamma di motori elettrici disponibili e le loro caratteristiche elettriche sono illustrati alla pagina 4 "Dati elettrici".

Per voltaggi diversi consultare il nostro Ufficio Tecnico.

Protezione del compressore

Tutti i compressori vengono forniti completi di protezione costituita da una catena di termistori PTC inseriti nello statore del motore elettrico e collegati al modulo elettronico di controllo KRIWAN INT69.

A richiesta, i compressori serie Q e S possono essere dotati di un sensore a termistore sullo scarico, collegato al modulo elettronico per il controllo della temperatura di compressione.

The latest series of reciprocating compressors for CO₂ applications in sub-critical cascade systems

Detailed study carried out in FRASCOLD laboratory results in the semi-hermetic single stage compressor series SK, suitable for sub-critical applications with refrigerant CO₂.

The design has evaluated every specific aspect of CO₂ applications and innovative solutions has been applied to grant reliability in any allowed condition.

Outstanding features

- dedicated advanced designing toward a compressor fit for very high pressures both working and static
- new high efficiency electric motors
- valve plates with innovative design
- POE lubricant specific for CO₂
- wide application range

Standard equipment

Compressors are supplied with internal relief valve (set point 28 bar), suction and discharge valves (sweat connections), rubber vibration absorbers, lubricant charge, nitrogen charge (1 bar) to protect compressor against humidity, oil sight glass and protection devices.

Compressors are coated with anti-rust protective primer and blue enamel coating.

Electric motor

Page 4 "Electric data" features the electric characteristics and performances of the whole range of available motors.

For different voltages, please contact our Technical Department.

Protection device

For all compressors, protection is performed by means a series of PTC thermistors placed into the stator winding of the electric motor and plugged to an electronic control module KRIWAN INT69.

PTC thermistor sensor is supplied on request for Q and S series compressors.

Una nuova serie di compressori per CO₂ dans des systèmes à cascade sous-critiques

Une nouvelle série de compresseurs pour applications avec CO₂ en installations sub-critiques à cascade.

Des études détaillées faits chez le laboratoire FRASCOLD se sont concrétisées dans les compresseurs semi-hermétiques monostadio série SK, capables de fonctionner avec réfrigérant CO₂ en conditions sub-critiques.

Le projet a tenu en considération tous les éléments caractéristiques de l'emploi avec CO₂ et a trouvé des solutions innovatrices pour garantir le parfait fonctionnement dans chaque point du champ d'emploi admis.

Caractéristiques saillantes

- projet général optimisé pour supporter les élevées pressions il soit de travail que statiques
- nouveaux moteurs électriques à haute efficacité
- plaques à clapets de nouveau projet
- lubrifiant POE spécifique pour CO₂
- ample champ d'emploi

Dotation standard

Les compresseurs sont fournis complets de soupape de sûreté interne (réglage 28 bar), de vannes d'aspiration et de refoulement (connections à souder), des supports éliminateurs de vibration en caoutchouc, charge huile lubrifiant, charge d'azote (1 bar) pour les préserver de l'humidité, indicateur de niveau huile, dispositifs de protection.

Tous les modèles sont vernis avec une couche protectrice d'antirouille et une couche d'émail bleu.

Moteurs électriques

L'entière gamme de moteurs électriques disponibles et leurs caractéristiques électriques sont illustrées à la page 4 "Données électriques".

Pour des voltages différents consulter notre service technique.

Protection du compresseur

Tous les compresseurs sont fournis complets de protection constituée d'une chaîne de thermistors PTC insérés dans le stator du moteur électrique et branchés au module électronique de contrôle KRIWAN-INT 69.

Sur demande les compresseurs séries Q et S peuvent être dotés d'un sensore à thermistore sur le refoulement, relié au module électronique pour contrôle de la température de refoulement.

Eine neue Verdichtersreihe für CO₂ Anwendungen in unterkritischen Kaskadensystemen

Die ausführlichen Studium beim FRASCOLD Labor konkretisierten sich in halbhermetischen einstufigen Verdichter Serie SK, geeignet für unterkritischen Anwendungen mit CO₂ Kältemittel.

Die Planung hat alle charakteristischen Elemente der Verwendung mit CO₂ in Betracht gezogen und hat innovative Lösungen gefunden, um den perfekten Betrieb in jedem Punkt des zulässigen Verwendungsbereiches zu gewähren.

Hauptmerkmale

- Optimierter Generalplan, um die hohe Arbeits- und Statischdrucke zu tragen
- neue hohe leistungsfähige Elektromotoren
- Ventilplatten von neuer Planung
- Schmiermittel POE geeignet für CO₂
- reicher Verwendungsbereich

Standardausführung

Die Verdichter sind komplett mit internem Sicherheitsventil (Tarierung 28 bar), Saug- und Druckventile (Lötanschlüsse), Schwingungsdämpfer, Schmierölfüllung, Schutzgasfüllung (1 bar), um sie vor Feuchtigkeit zu schützen, Ölschauglas, Motorschutzrelais. Alle Modelle sind mit einer Zweischichtlackierung (Rostschutz und blaue Deckschicht) lackiert.

Elektromotoren

Seite 4 "Elektrische Daten" illustriert die ganze Reihe der verfügbaren Motoren mit den elektrischen Eigenschaften.

Für andere Spannungen fragen Sie bitte unser technisches Büro.

Verdichterschutz

Für alle Verdichter erfolgt der Schutz durch einer PTC Thermistorenreihe, in dem Stator der elektronischen Motor gestellt und zum elektronischen Auslösegerät KRIWAN INT69 verbunden.

Auf Anfrage, sind die Q und S Verdichter komplett mit Thermistorsfühler, zum elektronischen Auslösegerät für Drucktemperaturregelung verbunden.

Dati tecnici

Technical data

Données techniques

Technische Daten

| Compressore Compressor Compresseur Verdichter | Motore elettrico Electric motor Moteur électrique Elektromotor | | Capacità volumetrica Displacement Volume balayé Hubvolumen (50 Hz) | Cilindri Cylinders Cylindres Zylinder | Rubinetto aspirazione Suction valve Soupape d'aspiration Saugventil | Rubinetto compressione Discharge valve Soupape de refoulement Druckventil | Lubrificante Lubrifiant Lubrifiant Schmiermittel | Pesi Weights Poids Gewicht | | Volume imballo Packing volume Volume emballage Verpackungsvolumen | | |
|--|---|------|--|--|--|--|---|-------------------------------------|-----|--|--|-----------------|
| | HP | kW | m ³ /h | nr | Ø " | Ø mm | Ø " | Ø mm | l | netto net Netto kg | lordo gross brut Brutto kg | dm ³ |
| A 1.5 4 S K | 1.5 | 1.10 | 3.95 | 2 | 5/8 | 15.8 | 1/2 | 12.7 | 1.2 | 36 | 37 | 37 |
| A 2 5 S K | 2 | 1.50 | 4.93 | 2 | 5/8 | 15.8 | 1/2 | 12.7 | 1.2 | 36 | 37 | 37 |
| A 2.5 6 S K | 2.5 | 1.75 | 6.03 | 2 | 5/8 | 15.8 | 1/2 | 12.7 | 1.2 | 36 | 37 | 37 |
| D 4 11 S K | 4 | 3.00 | 11.26 | 2 | 7/8 | 22.2 | 5/8 | 15.8 | 1.2 | 51 | 52 | 47 |
| D 4.5 13 S K | 4.5 | 3.30 | 13.15 | 2 | 7/8 | 22.2 | 5/8 | 15.8 | 1.2 | 51 | 52 | 47 |
| Q 7 19 S K | 7.5 | 5.50 | 19.12 | 4 | 1 1/8 | 28.6 | 3/4 | 19.0 | 1.8 | 79 | 82 | 76 |
| Q 8 22 S K | 8 | 6.00 | 22.30 | 4 | 1 1/8 | 28.6 | 3/4 | 19.0 | 1.8 | 79 | 82 | 76 |
| Q 9 25 S K | 9 | 6.70 | 24.69 | 4 | 1 1/8 | 28.6 | 3/4 | 19.0 | 1.8 | 79 | 82 | 76 |
| S 10 33 S K | 10 | 7.50 | 32.80 | 4 | 1 1/8 | 35.0 | 1 1/8 | 28.6 | 3.3 | 120 | 134 | 201 |

Dati elettrici

Electrical data

Données électriques

Elektrische Daten

| Compressore Compressor Compresseur Verdichter | 220-240/3/50 265-290/3/60 | | 380-420/3/50 DOL 440-480/3/60 DOL | | 380-420/3/50 DOL 440-480/3/60 DOL | | | |
|--|--|--------------|---|-------------|--------------------------------------|--------------|-------------|-------------|
| | Avviamento diretto Direct on line Démarrage direct Direktanlauf | | Avviamento frazionato Part winding start Démarrage bobinage fractionné Teilwicklungsanlauf | | DOL | | PWS | |
| | 220-240/3/50 Δ 265-290/3/60 Δ | | 380-420/3/50 440-480/3/60 | | MRA | LRA | MRA | LRA |
| | MRA | LRA | MRA | LRA | MRA | LRA | MRA | LRA |
| A 1.5 4 S K | 7.8 | 46.4 | 4.5 | 26.8 | | | | |
| A 2 5 S K | 8.8 | 37.5 | 5.1 | 21.7 | | | | |
| A 2.5 6 S K | 11.2 | 62.1 | 6.5 | 35.9 | | | | |
| D 4 11 S K | 11.8 | 89.8 | 6.8 | 51.9 | | | | |
| D 4.5 13 S K | 25.1 | 106.0 | 14.5 | 61.6 | | | | |
| Q 7 19 S K | 31.5 | 151.0 | 18.2 | 87.3 | | | | |
| Q 8 22 S K | 36.3 | 151.0 | 21.0 | 87.3 | | | | |
| Q 9 25 S K | 38.9 | 167.0 | 22.5 | 96.8 | | | | |
| S 10 33 S K | | | | | 29.5 | 102.0 | 29.5 | 59.0 |

① MRA Massima corrente di funzionamento A
LRA Corrente a rotore bloccato A

① MRA Maximum operating current A
LRA Locked rotor current A

① MRA Intensité maximum de fonctionnement A
LRA Courant rotor bloqué A

① MRA Maximaler Betriebsstrom A
LRA Anlaufstrom A

Campo di impiego

calcolato con surriscaldamento
del gas aspirato 20K

Application range

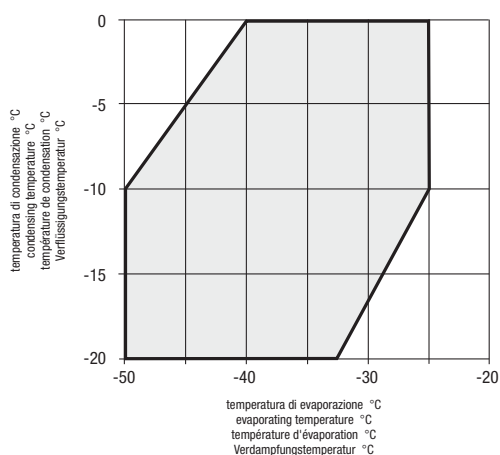
based on suction gas superheating 20K

Limites d'application

calculées avec une surchauffage
à l'aspiration de 20K

Anwendungsgrenzen

bezogen auf 20K Sauggas-Überhitzung



Capacità frigorifere

Refrigerating capacity

Puissances frigorifiques

Kälteleistungsdaten

| Compressore Compressor Compresseur Verdichter | Condensazione Condensing Condensation Verflüssigungs- temperatur °C | R744 (CO₂) | | | | | | | | | | | | | | | |
|--|--|-----------------------------------|-------|-------------------------------|-------|---------------------------------|-------|-----------------------------------|-------|-----------------------------------|-------|-------------------------------|-------|---------------------------------|-------|-----------------------------------|-----|
| | | Capacità frigorifera W | | Refrigerating capacity W | | Puissance frigorifique W | | Kälteleistungs- date W | | Potenza assorbita kW | | Power input kW | | Puissance absorbée kW | | Leistungs- aufnahme kW | |
| | | Temperatura di evaporazione °C | | Evaporating temperature °C | | Température d'évaporation °C | | Verdampfungs- temperatur °C | | Temperatura di evaporazione °C | | Evaporating temperature °C | | Température d'évaporation °C | | Verdampfungs- temperatur °C | |
| | | -25 | -30 | -35 | -40 | -45 | -50 | -25 | -30 | -35 | -40 | -45 | -50 | -25 | -30 | -35 | -40 |
| A 1.5 4 S K | -20 | | | 7800 | 6180 | 4790 | 3600 | | | | | 1.10 | 1.21 | 1.25 | 1.23 | | |
| | -15 | | 9020 | 7250 | 5720 | 4400 | 3270 | | 1.18 | 1.32 | 1.40 | 1.42 | 1.36 | | | | |
| | -10 | 10310 | 8360 | 6680 | 5230 | 3980 | 2900 | 1.29 | 1.47 | 1.59 | 1.64 | 1.61 | 1.49 | | | | |
| | -5 | 9550 | 7710 | 6120 | 4750 | 3570 | 1.68 | 1.89 | 2.00 | 2.01 | 1.90 | | | | | | |
| | 0 | 8710 | 6980 | 5490 | 4200 | 2.12 | 2.26 | 2.30 | 2.22 | | | | | | | | |
| A 2 5 S K | -20 | | | 9660 | 7630 | 5890 | 4390 | | | | | 1.45 | 1.54 | 1.57 | 1.57 | | |
| | -15 | | 11230 | 9000 | 7080 | 5420 | 3990 | | 1.55 | 1.72 | 1.81 | 1.83 | 1.77 | | | | |
| | -10 | 12860 | 10410 | 8300 | 6480 | 4920 | 3570 | 1.72 | 1.94 | 2.08 | 2.12 | 2.08 | 1.94 | | | | |
| | -5 | 11890 | 9600 | 7620 | 5910 | 4430 | 2.35 | 2.50 | 2.53 | 2.47 | 2.29 | | | | | | |
| | 0 | 10810 | 8670 | 6820 | 5220 | 2.82 | 2.88 | 2.84 | 2.68 | | | | | | | | |
| A 2.5 6 S K | -20 | | | 12320 | 9730 | 7490 | 5550 | | | | | 1.89 | 1.98 | 2.00 | 2.00 | | |
| | -15 | | 14230 | 11420 | 8980 | 6870 | 5060 | | 1.98 | 2.18 | 2.28 | 2.30 | 2.21 | | | | |
| | -10 | 16250 | 13190 | 10530 | 8220 | 6230 | 4500 | 2.18 | 2.44 | 2.59 | 2.63 | 2.58 | 2.43 | | | | |
| | -5 | 15010 | 12130 | 9620 | 7450 | 5570 | 2.73 | 2.93 | 3.02 | 3.00 | 2.87 | | | | | | |
| | 0 | 13710 | 11000 | 8640 | 6590 | 3.30 | 3.42 | 3.43 | 3.31 | | | | | | | | |
| D 4 11 S K | -20 | | | 22360 | 17680 | 13620 | 10120 | | | | | 3.46 | 3.63 | 3.69 | 3.69 | | |
| | -15 | | 25910 | 20880 | 16520 | 12770 | 9520 | | 3.65 | 4.03 | 4.24 | 4.30 | 4.22 | | | | |
| | -10 | 29680 | 24040 | 19170 | 14980 | 11350 | 8220 | 4.04 | 4.50 | 4.75 | 4.76 | 4.56 | 4.15 | | | | |
| | -5 | 27770 | 22380 | 17760 | 13760 | 10290 | 5.07 | 5.43 | 5.57 | 5.52 | 5.30 | | | | | | |
| | 0 | 25240 | 20240 | 15910 | 12140 | 6.18 | 6.37 | 6.38 | 6.17 | | | | | | | | |
| D 4.5 13 S K | -20 | | | 26010 | 20560 | 15840 | 11770 | | | | | 4.08 | 4.28 | 4.35 | 4.35 | | |
| | -15 | | 30140 | 24290 | 19210 | 14840 | 11080 | | 4.31 | 4.74 | 4.98 | 5.05 | 4.95 | | | | |
| | -10 | 34530 | 27960 | 22300 | 17420 | 13200 | 9560 | 4.75 | 5.27 | 5.55 | 5.57 | 5.34 | 4.88 | | | | |
| | -5 | 32210 | 26030 | 20660 | 16010 | 11980 | 5.92 | 6.33 | 6.49 | 6.44 | 6.19 | | | | | | |
| | 0 | 29370 | 23550 | 18510 | 14130 | 7.17 | 7.40 | 7.40 | 7.17 | | | | | | | | |
| Q 7 19 S K | -20 | | | 39860 | 31500 | 24240 | 17970 | | | | | 5.71 | 5.96 | 6.06 | 6.08 | | |
| | -15 | | 46100 | 36970 | 29060 | 22220 | 16320 | | 6.03 | 6.62 | 6.90 | 6.92 | 6.68 | | | | |
| | -10 | 52590 | 42710 | 34070 | 26620 | 20160 | 14590 | 6.64 | 7.73 | 7.76 | 7.84 | 7.68 | 7.31 | | | | |
| | -5 | 48610 | 39250 | 31140 | 24090 | 17990 | 8.22 | 8.78 | 8.99 | 8.91 | 8.55 | | | | | | |
| | 0 | 44400 | 35600 | 27940 | 21280 | 10.02 | 10.32 | 10.31 | 9.98 | | | | | | | | |
| Q 8 22 S K | -20 | | | 46260 | 36530 | 28090 | 20830 | | | | | 6.66 | 6.96 | 7.07 | 7.09 | | |
| | -15 | | 53470 | 42840 | 33660 | 25730 | 18910 | | 7.03 | 7.73 | 8.07 | 8.09 | 7.81 | | | | |
| | -10 | 60950 | 49400 | 39420 | 30790 | 23320 | 16880 | 7.76 | 8.62 | 9.10 | 9.19 | 9.00 | 8.56 | | | | |
| | -5 | 56200 | 45390 | 36000 | 27860 | 20810 | 9.64 | 10.33 | 10.58 | 10.48 | 10.05 | | | | | | |
| | 0 | 51210 | 41040 | 32220 | 24550 | 11.82 | 12.18 | 12.16 | 11.77 | | | | | | | | |
| Q 9 25 S K | -20 | | | 51190 | 40440 | 31100 | 23060 | | | | | 7.29 | 7.61 | 7.73 | 7.76 | | |
| | -15 | | 59130 | 47440 | 37280 | 28500 | 20940 | | 7.69 | 8.46 | 8.83 | 8.85 | 8.55 | | | | |
| | -10 | 67490 | 54720 | 43680 | 34120 | 25840 | 18700 | 8.49 | 9.44 | 9.96 | 10.06 | 9.86 | 9.37 | | | | |
| | -5 | 62280 | 50320 | 39910 | 30890 | 23060 | 10.56 | 11.32 | 11.60 | 11.49 | 11.01 | | | | | | |
| | 0 | 56800 | 45520 | 35730 | 27230 | 12.98 | 13.38 | 13.36 | 12.92 | | | | | | | | |
| S 10 33 S K | -20 | | | 67600 | 53380 | 41080 | 30450 | | | | | 9.51 | 9.95 | 10.12 | 10.15 | | |
| | -15 | | 78120 | 62570 | 49140 | 37570 | 27610 | | 10.06 | 11.08 | 11.58 | 11.61 | 11.20 | | | | |
| | -10 | 89010 | 72090 | 57570 | 44970 | 34060 | 24630 | 11.13 | 12.39 | 13.10 | 13.24 | 12.95 | 12.30 | | | | |
| | -5 | 82060 | 66190 | 52490 | 40620 | 30350 | 13.91 | 14.92 | 15.30 | 15.15 | 14.50 | | | | | | |
| | 0 | 74760 | 59870 | 47000 | 35840 | 17.16 | 17.70 | 17.68 | 17.08 | | | | | | | | |

FCAT15-02

Dati provvisori

Tentative data

Valeurs provisoires

Vorläufige Werte

Le potenze assorbite sono state calcolate alle seguenti condizioni:

- alimentazione 50Hz
- senza sottoraffreddamento del liquido
- temperatura ambiente 32°C
- surriscaldamento gas aspirato 20K

Input power data are based on the following conditions:

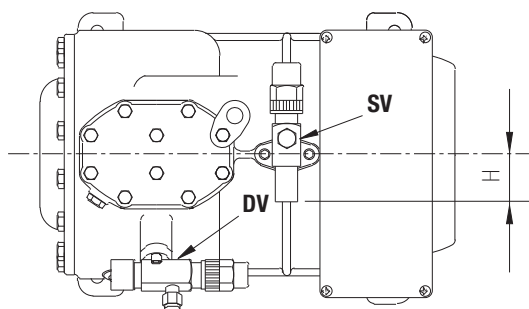
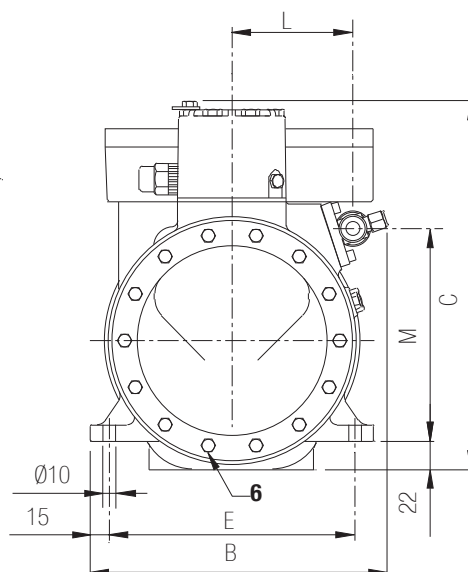
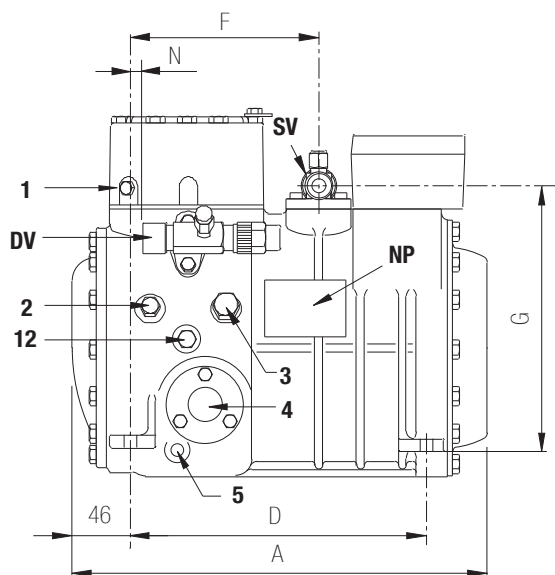
- power supply 50Hz
- without liquid subcooling
- ambient temperature 32°C
- suction gas superheating 20K

Les puissances absorbées ont été calculées selon les conditions suivantes:

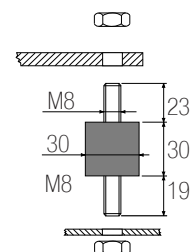
- alimentation 50Hz
- sans sous-refroidissement du liquide
- température ambiante 32°C
- surchauffage gaz aspiré 20K

Die auf den Seit 5 gezeigten Kälteleistungen basieren auf den folgenden Bedingungen:

- Netz 50Hz
- ohne Flüssigkeitsunterkühlung
- Umgebungstemperatur 32°C
- Sauggas-Überhitzung 20K



Supporto antivibrante
Vibration absorber
Support anti-vibrations
Vibrationsabsorber



Serie
Série

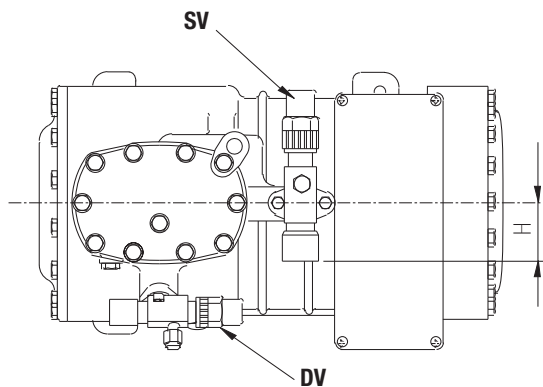
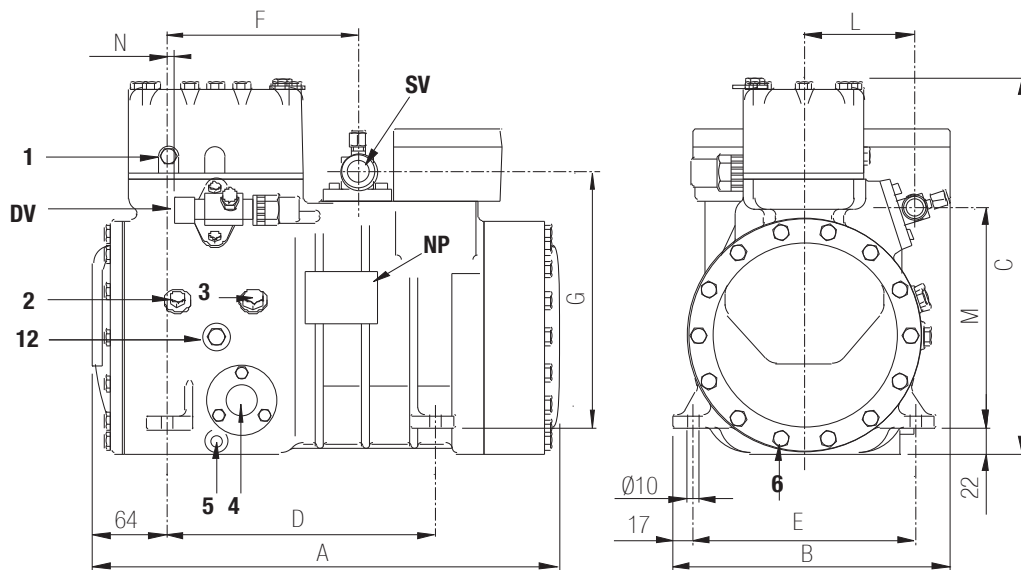
Series
Reihe

A-SK

FCAT15-02

| Compressore Compressor Compresseur Verdichter | Rubinetto aspirazione Suction valve Vanne d'aspiration Saugventil | | Rubinetto compressione Discharge valve Vanne de refoulement Druckventil | | Lunghezza Length Longueur Länge | Larghezza Width Largeur Breite | Altezza Height Hauteur Höhe | Interassi di fissaggio Base mounting Trous de fixation Befestigungslöcher | | Rubinetto aspirazione Suction valve Vanne d'aspiration Saugventil | | | Rubinetto compressione Discharge valve Vanne de refoulement Druckventil | | |
|--|--|---------|--|---------|--|---|--------------------------------------|--|---------|--|---------|---------|--|---------|---------|
| | Ø " | Ø mm | Ø " | Ø mm | | | | D mm | E mm | F mm | G mm | H mm | L mm | M mm | N mm |
| A 1.5 4 S K | 5/8 | 15.8 | 1/2 | 12.7 | 318 | 236 | 291 | 234 | 194 | 150 | 210 | 29 | 95 | 168 | 17 |
| A 2 5 S K | 5/8 | 15.8 | 1/2 | 12.7 | 318 | 236 | 291 | 234 | 194 | 150 | 210 | 29 | 95 | 168 | 17 |
| A 2.5 6 S K | 5/8 | 15.8 | 1/2 | 12.7 | 329 | 236 | 291 | 234 | 194 | 150 | 210 | 29 | 95 | 168 | 17 |

| | | | | |
|-----------|---------------------------|-----------------------|---|--------------------------|
| 1 | tappo di alta pressione | high pressure plug | bouchon haute pression | Stopfen Druckseite |
| 2 | tappo di bassa pressione | low pressure plug | bouchon basse pression | Stopfen Saugseite |
| 3 | tappo di carico olio | oil charge plug | bouchon charge d'huile | Stopfen Ölfüllung |
| 4 | spia livello olio | oil level sight glass | voyant de niveau huile | Ölschauglas |
| 5 | sede resistenza carter | crankcase heater seat | doigt de gant pour résistance de carter | Pos. für Ölsumpfeheizung |
| 6 | tappo scarico olio | oil drain plug | bouchon vidange d'huile | Stopfen Ölablass |
| 12 | tappo ritorno olio | oil return plug | bouchon retour d'huile | Stopfen Ölrückführung |
| DV | rubinetto di compressione | discharge valve | vanne de refoulement | Druckventil |
| NP | targhetta | name plate | plaque signalétique | Verdichtertypschild |
| SV | rubinetto di aspirazione | suction valve | vanne d'aspiration | Saugventil |

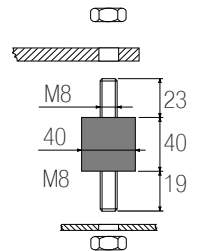


Supporto antivibrante

Vibration absorber

Support anti-vibrations

Vibrationsabsorber

Serie Series **D-SK**
Série Reihe

| Compressore Compressor Compresseur Verdichter | Rubinetto aspirazione Suction valve Vanne d'aspiration Saugventil | | Rubinetto compressione Discharge valve Vanne de refoulement Druckventil | | Lunghezza Length Longueur Länge | Larghezza Width Largeur Breite | Altezza Height Hauteur Höhe | Interassi di fissaggio Base mounting Trous de fixation Befestigungslöcher | | Rubinetto aspirazione Suction valve Vanne d'aspiration Saugventil | | | Rubinetto compressione Discharge valve Vanne de refoulement Druckventil | | |
|--|--|---------|--|---------|--|---|--------------------------------------|--|---------|--|---------|---------|--|---------|---------|
| | Ø " | Ø mm | Ø " | Ø mm | | | | D mm | E mm | F mm | G mm | H mm | L mm | M mm | N mm |
| D 4 11 S K | 7/8 | 22.2 | 5/8 | 15.8 | 401 | 242 | 323 | 234 | 194 | 167 | 220 | 49 | 96 | 192 | 6 |
| D 4.5 13 S K | 7/8 | 22.2 | 5/8 | 15.8 | 401 | 242 | 323 | 234 | 194 | 167 | 220 | 49 | 96 | 192 | 6 |

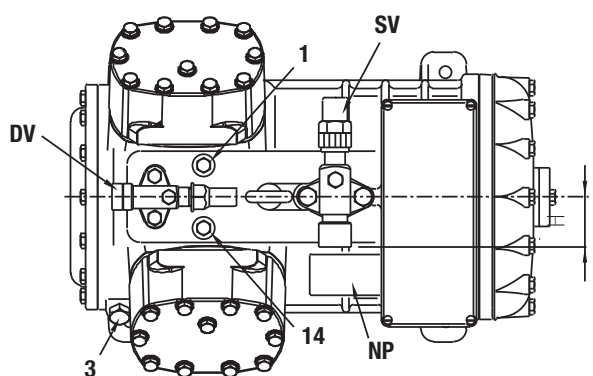
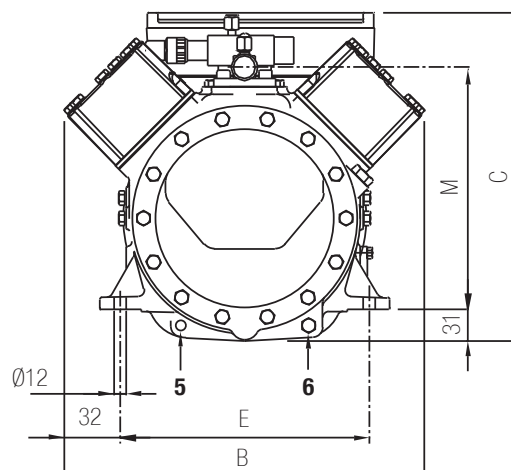
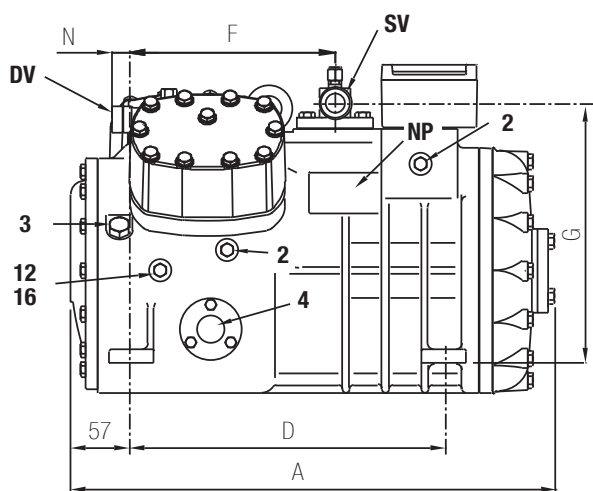
| | | | | |
|-----------|---------------------------|-----------------------|---|-------------------------|
| 1 | tappo di alta pressione | high pressure plug | bouchon haute pression | Stopfen Druckseite |
| 2 | tappo di bassa pressione | low pressure plug | bouchon basse pression | Stopfen Saugseite |
| 3 | tappo di carico olio | oil charge plug | bouchon charge d'huile | Stopfen Ölfüllung |
| 4 | spia livello olio | oil level sight glass | voyant de niveau huile | Ölschauglas |
| 5 | sede resistenza carter | crankcase heater seat | doigt de gant pour résistance de carter | Pos. für Ölsumpfheizung |
| 6 | tappo scarico olio | oil drain plug | bouchon vidange d'huile | Stopfen Ölabblass |
| 12 | tappo ritorno olio | oil return plug | bouchon retour d'huile | Stopfen Ölrückführung |
| DV | rubinetto di compressione | discharge valve | vanne de refoulement | Druckventil |
| NP | targhetta | name plate | plaque signalétique | Verdichtertypschild |
| SV | rubinetto di aspirazione | suction valve | vanne d'aspiration | Saugventil |

Dimensioni di ingombro

Dimensional drawing

Plans cotés

Mass Zeichnungen

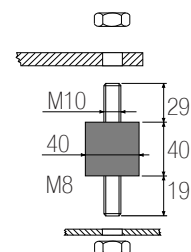


Supporto antivibrante

Vibration absorber

Support anti-vibrations

Vibrationsabsorber

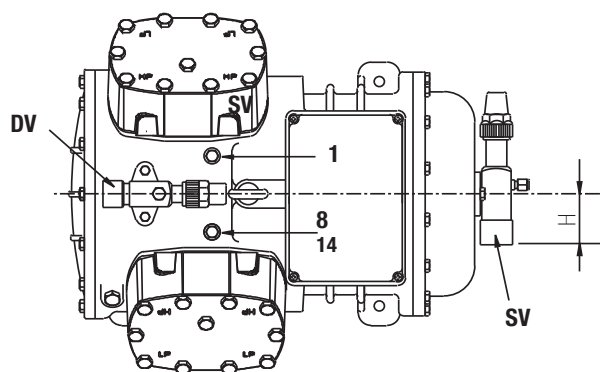
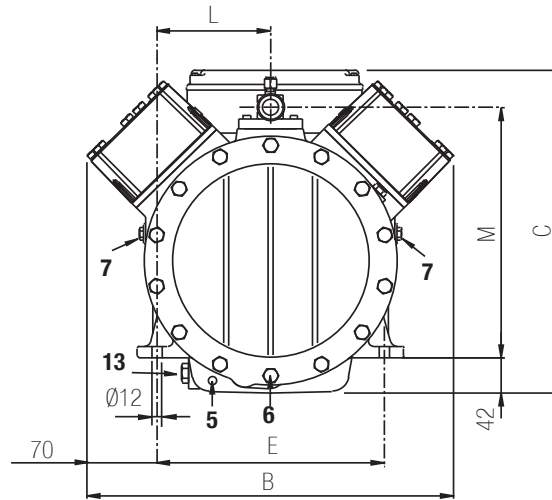
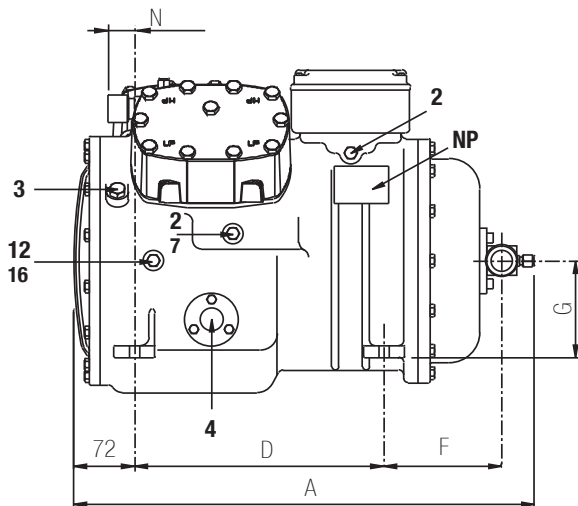


Serie Series
Série Reihe **Q-SK**

FCAT15-02

| Compressore Compressor Compresseur Verdichter | Rubinetto aspirazione Suction valve Vanne d'aspiration Saugventil | | Rubinetto compressione Discharge valve Vanne de refoulement Druckventil | | Lunghezza Length Longueur Länge | Larghezza Width Largeur Breite | Altezza Height Hauteur Höhe | Interassi di fissaggio Base mounting Trous de fixation Befestigungslöcher | | Rubinetto aspirazione Suction valve Vanne d'aspiration Saugventil | | | Rubinetto compressione Discharge valve Vanne de refoulement Druckventil | |
|--|--|---------|--|---------|--|---|--------------------------------------|--|---------|--|---------|---------|--|---------|
| | Ø " | Ø mm | Ø " | Ø mm | A mm | B mm | C mm | D mm | E mm | F mm | G mm | H mm | M mm | N mm |
| Q 7 19 S K | 1 ¹ / ₈ | 28.6 | ¾ | 19.0 | 449 | 355 | 324 | 312 | 246 | 203 | 258 | 53 | 240 | 12 |
| Q 8 21 S K | 1 ¹ / ₈ | 28.6 | ¾ | 19.0 | 449 | 355 | 324 | 312 | 246 | 203 | 258 | 53 | 240 | 12 |
| Q 9 25 S K | 1 ¹ / ₈ | 28.6 | ¾ | 19.0 | 482 | 355 | 324 | 312 | 246 | 203 | 258 | 53 | 240 | 12 |

| | | | | |
|-----------|---|--|---|----------------------------|
| 1 | tappo di alta pressione | high pressure plug | bouchon haute pression | Stopfen Druckseite |
| 2 | tappo di bassa pressione | low pressure plug | bouchon basse pression | Stopfen Saugseite |
| 3 | tappo di carico olio | oil charge plug | bouchon charge d'huile | Stopfen Ölfüllung |
| 4 | spia livello olio | oil level sight glass | voyant de niveau huile | Ölschauglas |
| 5 | sede resistenza carter | crankcase heater seat | doigt de gant pour résistance de carter | Pos. für Ölsumptheizung |
| 6 | tappo scarico olio | oil drain plug | bouchon vidange d'huile | Stopfen Ölablass |
| 12 | tappo ritorno olio | oil return plug | bouchon retour d'huile | Stopfen Ölrückführung |
| 14 | tappo per sensore massima temp. scarico | max. discharge temperature sensor plug | bouchon sensor max.temp.de refoulement | Stopfen für Druckgasfühler |
| 16 | tappo pressione carter | crankcase pressure plug | bouchon pression de carter | Stopfen für Drucksumpf |
| DV | rubinetto di compressione | discharge valve | vanne de refoulement | Druckventil |
| NP | targhetta | name plate | plaque signalétique | Verdichtertypschild |
| SV | rubinetto di aspirazione | suction valve | vanne d'aspiration | Saugventil |

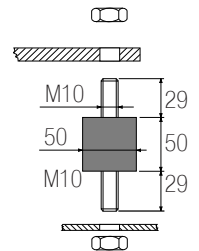


Supporto antivibrante

Vibration absorber

Support anti-vibrations

Vibrationsabsorber

Serie Series **S-SK**
Série Reihe

| Compressore Compressor Compresseur Verdichter | Rubinetto aspirazione Suction valve Vanne d'aspiration Saugventil | | Rubinetto compressione Discharge valve Vanne de refoulement Druckventil | | Lunghezza Length Longueur Länge | Larghezza Width Largeur Breite | Altezza Height Hauteur Höhe | Interassi di fissaggio Base mounting Trous de fixation Befestigungslöcher | | Rubinetto aspirazione Suction valve Vanne d'aspiration Saugventil | | | Rubinetto compressione Discharge valve Vanne de refoulement Druckventil | | |
|--|--|---------|--|---------|--|---|--------------------------------------|--|---------|--|---------|---------|--|---------|---------|
| | Ø " | Ø mm | Ø " | Ø mm | | | | D mm | E mm | F mm | G mm | H mm | L mm | M mm | N mm |
| S 10 33 S K | 1 3/8" | 35.0 | 1 3/8" | 28.6 | 550 | 429 | 384 | 292 | 266 | 147 | 115 | 58 | 133 | 289 | 28 |

| | | | | |
|-----------|--|--|---|----------------------------------|
| 1 | tappo di alta pressione | high pressure plug | bouchon haute pression | Stopfen Druckseite |
| 2 | tappo di bassa pressione | low pressure plug | bouchon basse pression | Stopfen Saugseite |
| 3 | tappo di carico olio | oil charge plug | bouchon charge d'huile | Stopfen Ölfüllung |
| 4 | spia livello olio | oil level sight glass | voyant de niveau huile | Ölschauglas |
| 5 | sede resistenza carter | crankcase heater seat | doigt de gant pour résistance de carter | Pos. für Ölsumpfheizung |
| 6 | tappo scarico olio | oil drain plug | bouchon vidange d'huile | Stopfen Ölabblass |
| 7 | attacco per valvola iniezione di liquido | liquid injection valve plug | bouchon electrov. injection de liquide | Stopfen Flüssigkeitseinspritzung |
| 8 | attacco per sensore iniezione di liquido | liquid injection sensor plug | bouchon sensor injection de liquide | Stopfen Sensor |
| 12 | tappo ritorno olio | oil return plug | bouchon retour d'huile | Stopfen Ölrückführung |
| 13 | tappo magnetico | magnetic plug | bouchon magnétique | Magnetstopfen |
| 14 | tappo sensore massima temp. compress. | max. discharge temperature sensor plug | bouchon sensor max. temp. del refoulement | Stopfen für Druckgasfühler |
| 16 | tappo pressione carter | crankcase pressure plug | bouchon pression de carter | Stopfen für Drucksumpf |
| DV | rubinetto di compressione | discharge valve | vanne de refoulement | Druckventil |
| NP | targhetta | name plate | plaque signalétique | Verdichtertypschild |
| SV | rubinetto di aspirazione | suction valve | vanne d'aspiration | Saugventil |

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