

Model

| | | | | |
|-------------|----------------|-------------------------|-------------|-----------------|
| Designation | HXD35MA | 220-240V/50Hz 1~ | Sales code: | CDO00082 |
|-------------|----------------|-------------------------|-------------|-----------------|

Compressor design

| | | | |
|----------------------------|--------------------------------|-----------------------|--------------------------------|
| Oil type | Mineral | Refrigerant(s) | R600a |
| Oil viscosity | 5cSt | Displacement | 3,5cm ³ / 0,21cu.in |
| Oil quantity | 84cm ³ / 2,8fl.oz | Compressors on pallet | 168 |
| Refr. charge - tech. limit | 110g / 3,9oz | | |
| Free gas volume comp. | 837cm ³ / 28,3fl.oz | | |
| Weight | 3,7kg / 8,2lbs | | |
| Motor protection | external | | |
| Winding resistance main | 54,5Ω (at 25°C) | | |
| Winding resistance aux | 38,3Ω (at 25°C) | | |
| Max. winding temp. | 120°C / 248°F | | |
| Max. discharge temp. | 120°C / 248°F | | |



General - Configurations with HXD35MA

| | Conf. 1 | Conf. 2 |
|------------------------|---|----------------|
| Motorconfiguration | RSCR | RSIR |
| Power supply (nominal) | 220-240V/50Hz | 220-240V/50Hz |
| Number of phases | 1 | 1 |
| Voltage range | 187-254V | 187-254V |
| Approvals | VDE | VDE |
| Starting torque | LST | LST |
| Note | Electrical equipment will be pre-assembled to compressor. | |

Applications with HXD35MA

| | Conf. 1 | Conf. 2 |
|-------------------------|----------------|----------------|
| Refrigerant | R600a | R600a |
| Application | LBP+MBP | LBP+MBP |
| System cooling | static | static |
| Hot gas defrost | -/- | -/- |
| Long interval pull down | OK | OK |

Electrical data - Configurations with HXD35MA

| | Conf. 1 | Conf. 2 |
|------------------------------|----------------|----------------|
| Starting device type | PTC | PTC |
| Run capacitor | 2μF | -/- |
| Start capacitor | -/- | -/- |
| LRA (locked rotor amps / 4s) | 2,2A | 2,2A |
| RLA (rated load amps / 1s) | 0,19A | 0,19A |
| Cut in current | 5,5A | 5,5A |
| IP class | 21 | 21 |

Model

Designation

HXD35MA

220-240V/50Hz 1~

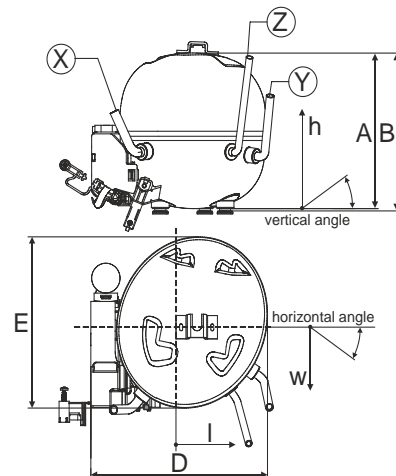
Sales code:

CDO00082

Compressor dimensions

| Housing | A Height | 133mm / 5,24in |
|---------|-------------------|-----------------|
| | B Height | 134,5mm / 5,3in |
| | C Length shell | 135mm / 5,31in |
| | D Length w. cover | 159mm / 6,26in |
| | E Width | 147mm / 5,79in |

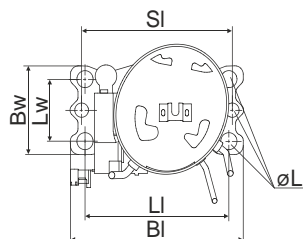
| Connectors | | Suction | Discharge | Process |
|------------------|----------------------------|--------------|-------------|--------------|
| | | X | Y | Z |
| Diameter | [mm] | øi 6,1-6,3 | øi 4,9-5,1 | øo 5,92-6,08 |
| | (i:inside, o:outside) [in] | øi 0,24-0,25 | øi 0,19-0,2 | øo 0,23-0,24 |
| Material | | copper | steel/CU | copper |
| Horizontal angle | ±2° | 0° | 80° | 74° |
| Vertical angle | ±2° | 79° | 79° | 72° |
| Position l/h/w | [mm] | -54/83/74 | 87/96/72 | 69/130/103 |
| | [in] | -2,1/3,3/2,9 | 3,4/3,8/2,8 | 2,7/5,1/4,1 |
| Straight tube l. | [mm] | 14 | 14 | 14 |
| | [in] | 0,5 | 0,5 | 0,5 |



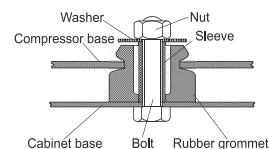
Compressor fixation

Adapter plate

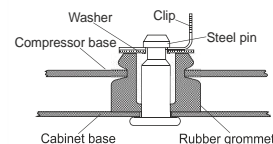
Bolt joint



| Baseplate | [mm] | [inch] |
|-------------|------|--------|
| BI | 204 | 8.03 |
| Bw | 100 | 3.94 |
| Large holes | [mm] | [inch] |
| LI | 170 | 6.7 |
| Lw | 70 | 2.76 |
| SI | 178 | 7 |
| øL | ø 16 | ø 0.63 |



Snap-on



| For standard mounting | one comp. | multi pack |
|----------------------------|-----------|------------|
| Adapter plate | 157008_ | |
| Bolt joint M6 ø16mm | 118-1917 | 118-1918 |
| Bolt joint ø1/4" ø16mm | 118-1946 | |
| Snap-on ø7,3 ø16mm | 118-1947 | 118-1919 |

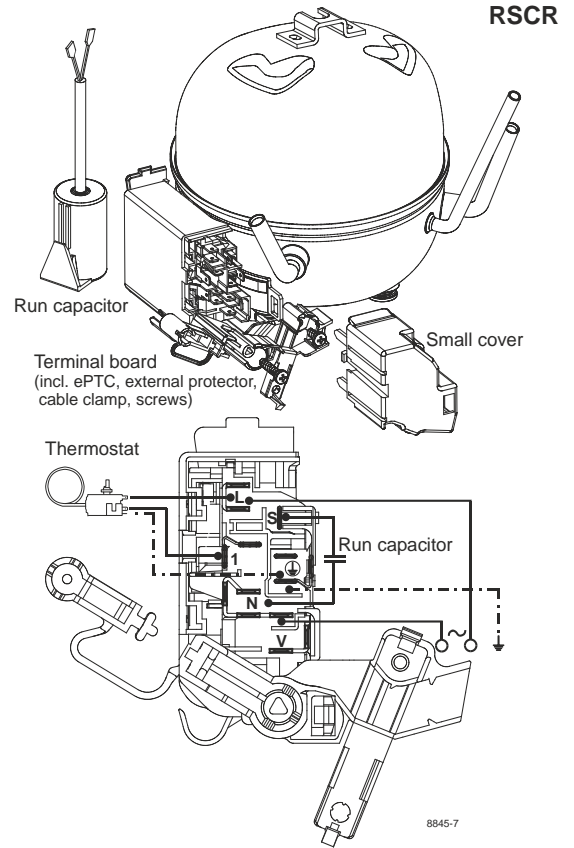
Model

Designation **HXD35MA** **220-240V/50Hz** Conf. 1 Sales code: **CDO00082**

Configuration

Motorconfiguration **RSCR**
 Power supply (nominal) **220-240V/50Hz 1~**
 Refrigerant **R600a**
 Application **LBP+MBP**
 Voltage range **187-254V**
 Starting torque **LST**
 Approvals **VDE**

Electrical accessories / wiring diagram

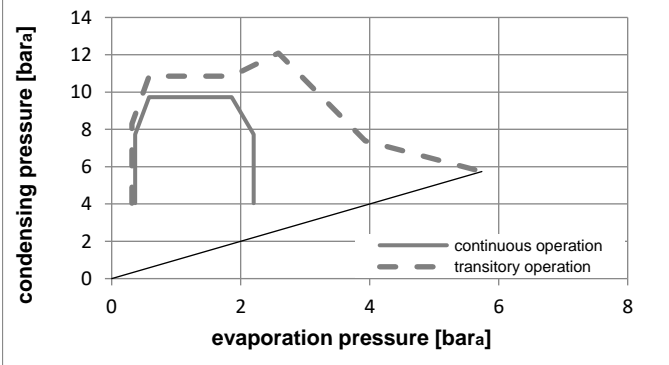
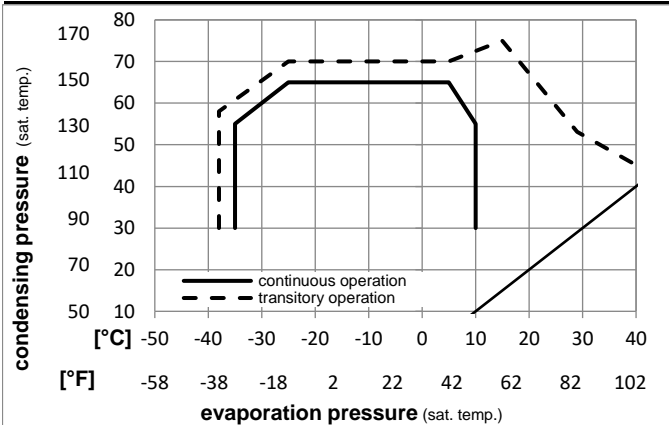


Ambient temperatures / system cooling

Ambient temperature min.: **10°C / 50°F**
 Ambient temperature max.: **43°C / 110°F**

| System cooling (n/a: outside limits) | | | |
|--------------------------------------|--------|--------|-----|
| T ambient | LBP | MBP | HBP |
| 32°C / 90°F | static | static | n/a |
| 38°C / 100°F | static | static | n/a |
| 43°C / 110°F | static | static | n/a |

Operation pressure range



Components (will be pre-assembled)

- terminal board (ePTC,4.8mm) BX E6
- motor protector BDG AE 88 AHM x E6
- run capacitor (2μF, 4.8mm) cap. 2μF
- cover terminal board 160943_

Model

Designation **HXD35MA 220-240V/50Hz** Conf. 1 Sales code: **CDO00082**

Optimization + standard conditions

220-240V/50Hz 1~, RSCR, static, VDE

| | Evaporating pressure (saturation temperature) | | | | Condensing pressure (saturation temperature) | | | | | | Power consumption | | | ASHRAE LBP |
|--|---|------|------|------|--|---------|----------|-------|----------|-----------|-------------------|------|----------------|-------------|
| | pe | pc | RGT | Tliq | Cooling capacity | | | COP | EER | | P1 | I | Ref. mass flow | |
| | [°C] | [°F] | [°C] | [°F] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [kg/h] | |
| | -23,3 | 54,4 | 32,2 | 32,2 | 54,8 | 187 | 47,1 | 1,56 | 5,32 | 1,34 | 35,2 | 0,18 | 0,59 | ASHRAE LBP |
| | -10 | 130 | 90 | 90 | | | | | | | | | | |
| | -25 | 55 | 32 | 55 | 40,3 | 138 | 34,7 | 1,19 | 4,08 | 1,03 | 33,8 | 0,17 | 0,53 | cecomaf LBP |
| | -13 | 131 | 89,6 | 131 | | | | | | | | | | |
| | -35 | 40 | 20 | 40 | 29,9 | 102 | 25,7 | 1,14 | 3,89 | 0,98 | 26,2 | 0,15 | 0,36 | EN12900 LBP |
| | -31 | 104 | 68 | 104 | | | | | | | | | | |
| | -6,66 | 54,4 | 35 | 46,1 | 118,2 | 404 | 101,7 | 2,35 | 8,03 | 2,02 | 50,3 | 0,25 | 1,41 | ASHRAE MBP |
| | 20 | 130 | 95 | 115 | | | | | | | | | | |
| | -10 | 55 | 32 | 55 | 92,2 | 315 | 79,3 | 1,94 | 6,64 | 1,67 | 47,4 | 0,23 | 1,21 | cecomaf MBP |
| | 14 | 131 | 89,6 | 131 | | | | | | | | | | |
| | -10 | 45 | 20 | 45 | 103,1 | 352 | 88,7 | 2,32 | 7,91 | 1,99 | 44,5 | 0,22 | 1,32 | EN12900 MBP |
| | 14 | 113 | 68 | 113 | | | | | | | | | | |

Performance tables

220-240V/50Hz 1~, RSCR, static, VDE

| | pe | Cooling capacity | | | COP | EER | | P1 | I | m | |
|------------------|------|------------------|-------|---------|----------|-------|----------|-----------|------|------|--------|
| | [°C] | [°F] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [kg/h] |
| [°C / °F] | -35 | -31 | 26,9 | 92 | 23,1 | 1,03 | 3,51 | 0,88 | 26,1 | 0,15 | 0,32 |
| cond. pressure | -25 | -13 | 48,9 | 167 | 42,1 | 1,48 | 5,04 | 1,27 | 33,1 | 0,17 | 0,58 |
| pc= 45/113 | -15 | 5 | 84,2 | 288 | 72,5 | 2,07 | 7,06 | 1,78 | 40,7 | 0,20 | 1,01 |
| return gas temp. | -10 | 14 | 107,3 | 366 | 92,3 | 2,41 | 8,24 | 2,08 | 44,5 | 0,22 | 1,28 |
| RGT= 32/90 | 0 | 32 | 165,0 | 563 | 142,0 | 3,21 | 10,98 | 2,77 | 51,3 | 0,25 | 1,99 |
| liquid temp | 5 | 41 | 199,9 | 683 | 172,1 | 3,69 | 12,60 | 3,17 | 54,2 | 0,27 | 2,42 |
| Tliq= 45/113 | 10 | 50 | 239,2 | 817 | 205,9 | 4,23 | 14,44 | 3,64 | 56,6 | 0,28 | 2,90 |
| [°C / °F] | -35 | -31 | 19,1 | 65 | 16,4 | 0,74 | 2,53 | 0,64 | 25,8 | 0,14 | 0,25 |
| cond. pressure | -25 | -13 | 40,3 | 138 | 34,7 | 1,19 | 4,08 | 1,03 | 33,8 | 0,17 | 0,53 |
| pc= 55/131 | -15 | 5 | 72,0 | 246 | 62,0 | 1,68 | 5,75 | 1,45 | 42,8 | 0,21 | 0,94 |
| return gas temp | -10 | 14 | 92,2 | 315 | 79,3 | 1,94 | 6,64 | 1,67 | 47,4 | 0,23 | 1,21 |
| RGT= 32/90 | 0 | 32 | 142,0 | 485 | 122,2 | 2,52 | 8,61 | 2,17 | 56,3 | 0,27 | 1,88 |
| liquid temp | 5 | 41 | 172,0 | 587 | 148,0 | 2,85 | 9,72 | 2,45 | 60,4 | 0,29 | 2,28 |
| Tliq= 55/131 | 10 | 50 | 205,6 | 702 | 176,9 | 3,21 | 10,95 | 2,76 | 64,1 | 0,31 | 2,74 |

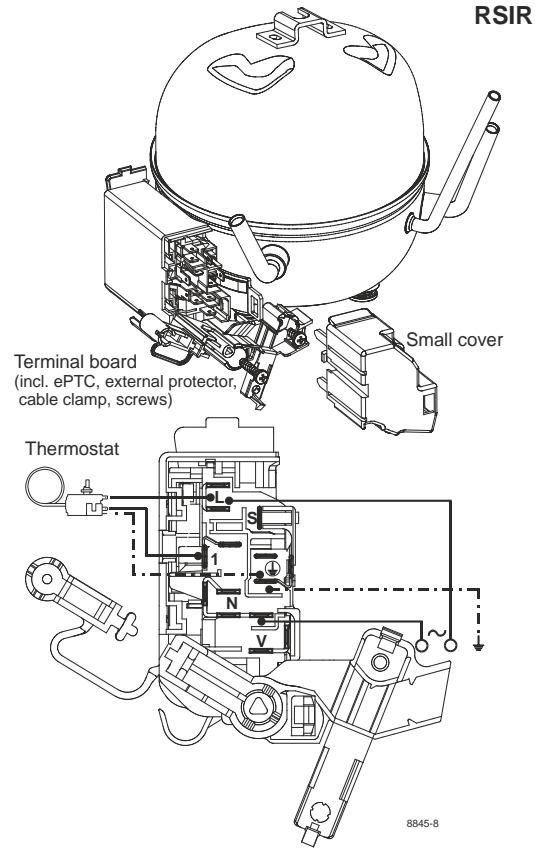
Model

| | | | | | |
|-------------|----------------|----------------------|----------------|-------------|-----------------|
| Designation | HXD35MA | 220-240V/50Hz | Conf. 2 | Sales code: | CDO00082 |
|-------------|----------------|----------------------|----------------|-------------|-----------------|

Configuration

| | |
|------------------------|------------------|
| Motorconfiguration | RSIR |
| Power supply (nominal) | 220-240V/50Hz 1~ |
| Refrigerant | R600a |
| Application | LBP+MBP |
| Voltage range | 187-254V |
| Starting torque | LST |
| Approvals | VDE |

Electrical accessories / wiring diagram

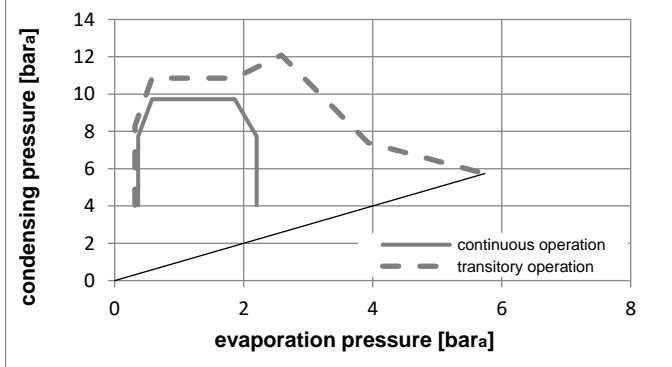
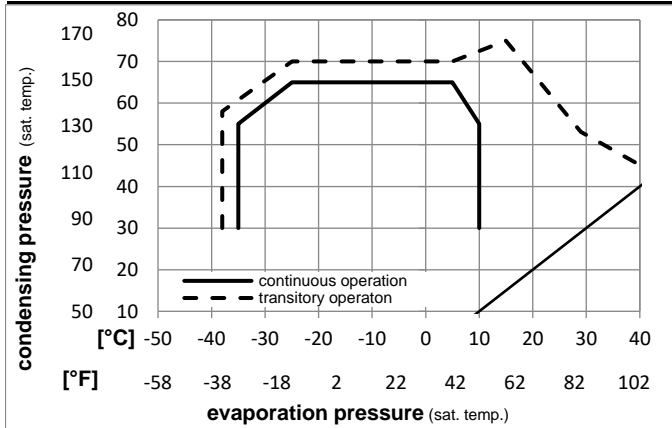


Ambient temperatures / system cooling

| | |
|---------------------------|--------------|
| Ambient temperature min.: | 10°C / 50°F |
| Ambient temperature max.: | 43°C / 110°F |

| System cooling (n/a: outside limits) | | | |
|--------------------------------------|--------|--------|-----|
| T ambient | LBP | MBP | HBP |
| 32°C / 90°F | static | static | n/a |
| 38°C / 100°F | static | static | n/a |
| 43°C / 110°F | static | static | n/a |

Operation pressure range



Components (will be pre-assembled)

- terminal board (ePTC,4.8mm) BX E6
- motor protector BDG AE 88 AHM x E6
- cover terminal board 160943_

Model

Designation **HXD35MA 220-240V/50Hz** Conf. **2** Sales code: **CDO00082**

Optimization + standard conditions

220-240V/50Hz 1~, RSIR, static, VDE

| | Evaporating pressure (saturation temperature) | | | | Condensing pressure (saturation temperature) | | | Return gas temp. | | | Liquid temp. | | | Cooling capacity | | | COP | | | EER | | | Power consumption | | | ASHRAE LBP |
|------|---|------|------|------|--|---------|----------|------------------|----------|-----------|--------------|------|------|------------------|-----|--------|-----|----------|-----------|-----|-----|--------|-------------------|--|--|------------|
| | pe | pc | RGT | Tliq | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | P1 | I | m | [W] | [A] | [kg/h] | [W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [kg/h] | | | | |
| [°C] | -23,3 | 54,4 | 32,2 | 32,2 | 54,3 | 186 | 46,7 | 1,46 | 4,97 | 1,25 | 37,3 | 0,30 | 0,58 | | | | | | | | | | | | | |
| [°F] | -10 | 130 | 90 | 90 | | | | | | | | | | | | | | | | | | | | | | |
| [°C] | -25 | 55 | 32 | 55 | 40,1 | 137 | 34,5 | 1,12 | 3,82 | 0,96 | 35,8 | 0,29 | 0,52 | | | | | | | | | | | | | |
| [°F] | -13 | 131 | 89,6 | 131 | | | | | | | | | | | | | | | | | | | | | | |
| [°C] | -35 | 40 | 20 | 40 | 28,6 | 98 | 24,6 | 1,04 | 3,55 | 0,90 | 27,5 | 0,28 | 0,35 | | | | | | | | | | | | | |
| [°F] | -31 | 104 | 68 | 104 | | | | | | | | | | | | | | | | | | | | | | |
| [°C] | -6,66 | 54,4 | 35 | 46,1 | 116,7 | 399 | 100,4 | 2,17 | 7,42 | 1,87 | 53,7 | 0,35 | 1,39 | | | | | | | | | | | | | |
| [°F] | 20 | 130 | 95 | 115 | | | | | | | | | | | | | | | | | | | | | | |
| [°C] | -10 | 55 | 32 | 55 | 90,8 | 310 | 78,2 | 1,79 | 6,13 | 1,54 | 50,6 | 0,34 | 1,19 | | | | | | | | | | | | | |
| [°F] | 14 | 131 | 89,6 | 131 | | | | | | | | | | | | | | | | | | | | | | |
| [°C] | -10 | 45 | 20 | 45 | 102,3 | 349 | 88,0 | 2,17 | 7,39 | 1,86 | 47,2 | 0,33 | 1,31 | | | | | | | | | | | | | |
| [°F] | 14 | 113 | 68 | 113 | | | | | | | | | | | | | | | | | | | | | | |

Performance tables

220-240V/50Hz 1~, RSIR, static, VDE

| | pe | Cooling capacity | | | COP | | | EER | | | P1 | I | m |
|------------------|------|------------------|-------|---------|----------|-------|----------|-----------|------|------|--------|---|---|
| | [°C] | [°F] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [kg/h] | | |
| [°C / °F] | -35 | -31 | 26,1 | 89 | 22,4 | 0,95 | 3,24 | 0,82 | 27,5 | 0,28 | 0,31 | | |
| cond. pressure | -25 | -13 | 48,7 | 166 | 41,9 | 1,39 | 4,75 | 1,20 | 35,0 | 0,29 | 0,58 | | |
| pc= 45/113 | -15 | 5 | 83,6 | 286 | 72,0 | 1,94 | 6,62 | 1,67 | 43,2 | 0,31 | 1,00 | | |
| return gas temp. | -10 | 14 | 106,5 | 364 | 91,6 | 2,25 | 7,70 | 1,94 | 47,2 | 0,33 | 1,27 | | |
| RGT= 32/90 | 0 | 32 | 164,2 | 561 | 141,4 | 2,99 | 10,22 | 2,58 | 54,9 | 0,35 | 1,98 | | |
| liquid temp | 5 | 41 | 199,8 | 682 | 171,9 | 3,43 | 11,73 | 2,96 | 58,2 | 0,37 | 2,41 | | |
| Tliq= 45/113 | 10 | 50 | 240,0 | 820 | 206,6 | 3,94 | 13,45 | 3,39 | 61,0 | 0,38 | 2,91 | | |
| [°C / °F] | -35 | -31 | 19,3 | 66 | 16,6 | 0,70 | 2,40 | 0,61 | 27,4 | 0,28 | 0,25 | | |
| cond. pressure | -25 | -13 | 40,1 | 137 | 34,5 | 1,12 | 3,82 | 0,96 | 35,8 | 0,29 | 0,52 | | |
| pc= 55/131 | -15 | 5 | 70,9 | 242 | 61,0 | 1,56 | 5,32 | 1,34 | 45,6 | 0,32 | 0,93 | | |
| return gas temp | -10 | 14 | 90,8 | 310 | 78,2 | 1,79 | 6,13 | 1,54 | 50,6 | 0,34 | 1,19 | | |
| RGT= 32/90 | 0 | 32 | 141,1 | 482 | 121,4 | 2,33 | 7,95 | 2,00 | 60,6 | 0,37 | 1,86 | | |
| liquid temp | 5 | 41 | 171,9 | 587 | 148,0 | 2,64 | 9,00 | 2,27 | 65,2 | 0,39 | 2,28 | | |
| Tliq= 55/131 | 10 | 50 | 207,0 | 707 | 178,1 | 2,98 | 10,16 | 2,56 | 69,6 | 0,41 | 2,76 | | |