

| PAGE | SUBJECT OF SHEET                  | OBJECT   | DESIGNATION | REVISION |
|------|-----------------------------------|--|-------------|----------|
| 1    | PAGES LIST                        | ELECTRICAL EQUIPMENT FOR FAN MOTOR UNIT COOLERS              |             |          |
| 2    | BLOCK DIAGRAM                     | ELECTRICAL EQUIPMENT FOR FAN MOTOR UNIT COOLERS              |             |          |
| 3    | DIMENSIONAL DRAWING & CONNECTIONS | ELECTRICAL EQUIPMENT FOR FAN MOTOR UNIT COOLERS              |             |          |
| 4    | DIMENSIONAL DRAWING & CONNECTIONS | ELECTRICAL EQUIPMENT FOR FAN MOTOR UNIT COOLERS              |             |          |
| 5    | DIMENSIONAL DRAWING & CONNECTIONS | ELECTRICAL EQUIPMENT FOR FAN MOTOR UNIT COOLERS              |             |          |
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| 7    | DIMENSIONAL DRAWING & CONNECTIONS | ELECTRICAL EQUIPMENT FOR FAN MOTOR UNIT COOLERS              |             |          |
| 8    | DIMENSIONAL DRAWING & CONNECTIONS | ELECTRICAL EQUIPMENT FOR FAN MOTOR UNIT COOLERS              |             |          |
| 9    | DIMENSIONAL DRAWING & CONNECTIONS | ELECTRICAL EQUIPMENT FOR FAN MOTOR UNIT COOLERS              |             |          |
| 10   | TECHNICAL DESCRIPTION             | ELECTRICAL EQUIPMENT FOR FAN MOTOR UNIT COOLERS              |             |          |
| 11   | TECHNICAL DESCRIPTION             | ELECTRICAL EQUIPMENT FOR FAN MOTOR UNIT COOLERS              |             |          |
| 12   | TECHNICAL DESCRIPTION             | ELECTRICAL EQUIPMENT FOR FAN MOTOR UNIT COOLERS              |             |          |
| 13   | TECHNICAL DESCRIPTION             | ELECTRICAL EQUIPMENT FOR FAN MOTOR UNIT COOLERS              |             |          |
| 14   | CABLE LIST                        | ELECTRICAL EQUIPMENT FOR FAN MOTOR UNIT COOLERS              |             |          |
|      |                                   |  |             |          |
|      |                                   |  |             |          |
|      |                                   |  |             |          |
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|      |                                   |  |             |          |
|      |                                   |  |             |          |
|      |                                   |  |             |          |
|      |                                   |  |             |          |
| REV. | DATE                              | EXPLANATION  | CHECKED     | APPROVED |
| C    | 01/10/2010                        | MODIFIED ELECTRIC DEFROST BOX DRAWING FOR 400 AND 500 SERIES |             |          |
| D    | 15/05/2012                        | MODIFIED ELECTRIC DEFROST BOX DRAWING FOR 400 AND 500 SERIES |             |          |
| E    | 06/06/2012                        | ADDED OPTIGO CC SERIES                                       |             |          |

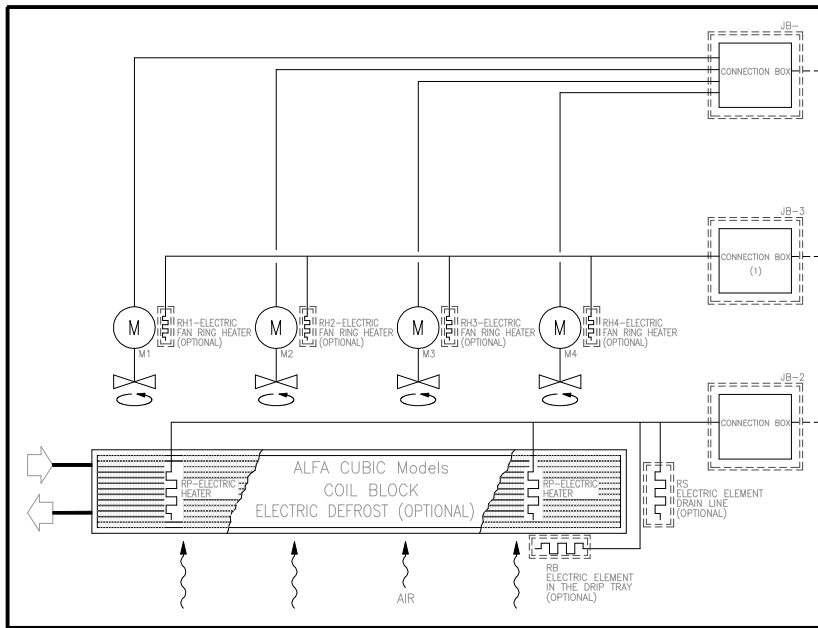


|        |             |                       |       |
|--------|-------------|-----------------------|-------|
| /      | Date        | CAD                   | SCALE |
| MADE   | 04 July '05 | PCP                   |       |
| CHKD.  | 04 July '05 | GG/Giovanni Graffitti |       |
| APPVD. | 04 July '05 | SH/Sergio Hike        |       |

UNIT COOLERS  
ALFA-CUBIC TYPE  
& OPTIGO CC

ELECTRICAL EQUIPMENT  
FOR FAN MOTOR AND ELECTRICAL DEFROST  
PAGE LIST

|        |              |          |       |           |      |
|--------|--------------|----------|-------|-----------|------|
| OBJECT | PROJECT #    | DESIGN # | SHEET | OF SHEETS | REV. |
|        | AS-DRAWING # |          | 01    | 14        | E    |
|        | SMXA011      |          |       |           |      |



Key List:

- Unit
- Optional Alfa Laval delivery
- Customer Supply
- Supply in according to order

NOTE:

- (1) N°2 CONNECTION BOXES FOR MODEL 354-403-503



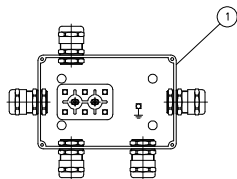
| Date        | SCALE                 |
|-------------|-----------------------|
| 04 July '05 | PCP                   |
| 04 July '05 | GG/Giovanni Graffitti |
| 04 July '05 | SH/Sergio Hike        |

UNIT COOLERS  
ALFA-CUBIC TYPE  
& OPTIGO CC

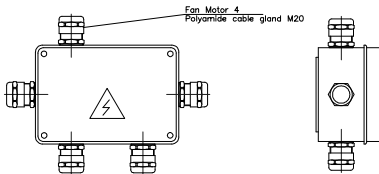
ELECTRICAL EQUIPMENT  
FOR FAN MOTOR AND ELECTRICAL DEFROST  
ELECTRICAL SYSTEM LAYOUT

| OBJECT       | DCC          | Pg. Cnt. | CNT |
|--------------|--------------|----------|-----|
| UNIT COOLERS | DCC          | 02       | 14  |
| PROJECT #    | AS-DRAWING # | REV.     |     |
|              | SMXA011      |          | E   |

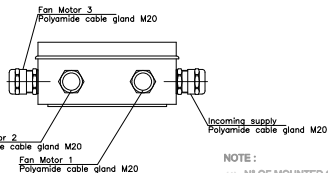
Valid for the electric fan motors connection box of all the models of series 250-350-400-500



1



Fan Motor 4  
Polyamide cable gland M20



Fan Motor 3  
Polyamide cable gland M20

Fan Motor 2  
Polyamide cable gland M20

Fan Motor 1  
Polyamide cable gland M20

Incoming supply  
Polyamide cable gland M20

NOTE:

(1) N° OF MOUNTED CABLE IS ACCORDING TO ORDER

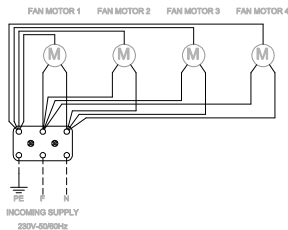
Legend

1 Connection Box for electric fan motor (JB-1)

Technical Data

Material : Plastic  
 IP Protection Class : Min IP 55  
 Colour : Grey RAL 7035  
 Insulation Class : II  
 Ambient Temp. : Min -25°C Max +50° C  
 Weight : Approx. 0,5kg

CONNECTION DIAGRAM



|       |             |                       |
|-------|-------------|-----------------------|
| Date  | 04 July '05 | PCP                   |
| MADE  | 04 July '05 | GG/Giovanni Graffitti |
| CHKD. | 04 July '05 | SH/Sergio Hike        |
| APPVD | 04 July '05 |                       |

UNIT COOLERS  
 ALFA-CUBIC TYPE  
 & OPTIGO CC

ELECTRICAL EQUIPMENT  
 FOR FAN MOTOR AND ELECTRICAL DEFROST  
 DIMENSIONAL DRAWING & CONNECTIONS

|           |              |       |          |              |
|-----------|--------------|-------|----------|--------------|
| OBJECT    | .....        | DCC   | Pg. Cnt. | CNT          |
| LN. 03    | 03           | SHEET | 03       | OF SHEETS 14 |
| PROJECT # | AS-DRAWING # | REV.  |          |              |
|           | SMXA011      |       |          | E            |

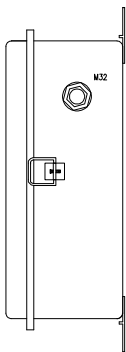
This page and next one show the electric fan motors connection box valid for all the models of series 400 and 500

Legend

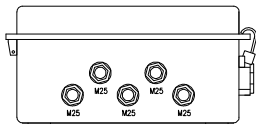
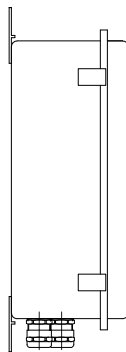
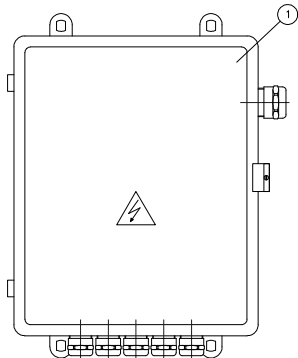
1 Connection Box for electric fan motor (JB-1)

Technical Data

Material : Sheet of steel  
 IP Protection Class : Min IP 55  
 Colour : Grey RAL 7032  
 Insulation Class : I  
 Ambient Temp. : Min -25°C Max +50° C  
 Weight : Approx. 4kg



Enclosure  
EBI 8.05.2



|     |           |
|-----|-----------|
| M32 | Hole Ø35  |
| M25 | Holes Ø28 |



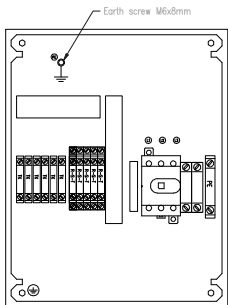
|        |             |                       |       |
|--------|-------------|-----------------------|-------|
| /      | Date        | CAD                   | SCALE |
| MADE   | 04 July '05 | PCP                   |       |
| CHKD.  | 04 July '05 | GG/Giovanni Graffitti |       |
| APPVD. | 04 July '05 | SH/Sergio Hike        |       |

UNIT COOLERS  
ALFA-CUBIC TYPE  
& OPTIGO CC

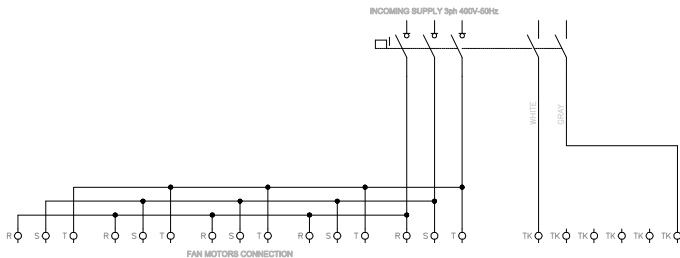
ELECTRICAL EQUIPMENT  
FOR FAN MOTOR AND ELECTRICAL DEFROST  
DIMENSIONAL DRAWING & CONNECTIONS

|           |              |     |     |           |     |
|-----------|--------------|-----|-----|-----------|-----|
| OBJECT    | .....        | DCC | PCC | Pg. Cnt.  | CNT |
| LINE      | 03           | 03  | 03  | SHEET     | 04  |
| PROJECT # | AS-DRAWING # |     |     | OF SHEETS | 14  |
|           | SMXA011      |     |     | REV.      | E   |

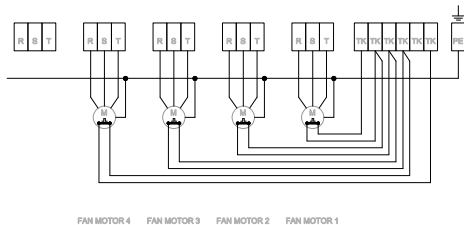
**INTERNAL VIEW**



**WIRING DIAGRAM**



**CONNECTION DIAGRAM**



|        |             |                      |       |
|--------|-------------|----------------------|-------|
| /      | Date        | CAD                  | SCALE |
| MADE   | 04 July '05 | PCP                  |       |
| CHKD.  | 04 July '05 | GG/Giovanni Graffiti |       |
| APPVD. | 04 July '05 | SH/Sergio Hike       |       |

UNIT COOLERS  
ALFA-CUBIC TYPE  
& OPTIGO CC

ELECTRICAL EQUIPMENT  
FOR FAN MOTOR AND ELECTRICAL DEFROST  
DIMENSIONAL DRAWING & CONNECTIONS

|           |              |       |          |              |
|-----------|--------------|-------|----------|--------------|
| OBJECT    | .....        | DCC   | Pg. Cnt. | CNT          |
| UNIT      | .....        | ..... | number   | .....        |
| PROJECT # | AS-DRAWING # | SHEET | 05       | OF SHEETS 14 |
|           | SMXA011      | REV.  |          | E            |

Valid for the electric defrost connection box of all the models of series 250 and 350

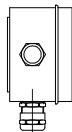
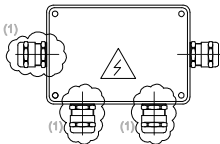
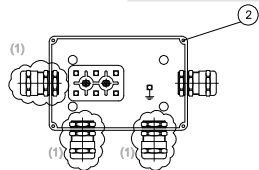
Legend

2 Connection Box for electric defrost (JB-2)

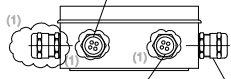
Technical Data

Material : Plastic  
 IP Protection Class : Min IP 55  
 Colour : Grey RAL 7035  
 Insulation Class : II  
 Ambient Temp. : Min -25°C Max +50° C  
 Weight : Approx. 0,5kg

CONNECTION DIAGRAM



Electric element drain line  
 Polyamide cable gland M20



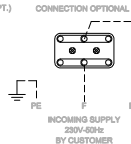
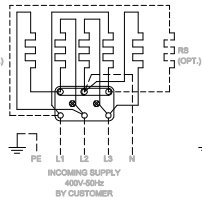
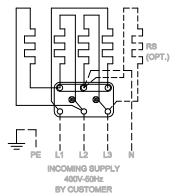
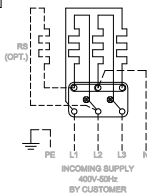
Incoming supply  
 Polyamide cable gland M20

Electric defrost  
 Polyamide cable gland M20

CONNECTION STANDARD  
 GL-251A/252A/253A  
 RL-251A/252A/253A  
 BL-251A/252A/253A

CONNECTION STANDARD  
 GL-351B/352B/353B/351A/352A/353A/354A  
 RL-351B/352B/353B/351A/352A/353A/354A  
 BL-351B/352B/353B/351A/352A/353A/354A

CONNECTION STANDARD  
 GL-351B/352B/353B/354B  
 RL-351B/352B/353B/354B  
 BL-351B/352B/353B/354B



NOTE:  
 (1) POLYAMIDE MULTIPLE CABLE GLAND IP54 WITH PVC SEAL WITH 4 HOLES Ø3mm  
 FOR CABLES OF ELECTRIC DEFROST AND ELECTRIC ELEMENT DRAIN LINE  
 MOUNTED ONLY WHEN ONE OF THIS OPTIONAL IS ORDERED.  
**IMPORTANT: CLOSE THE FREE HOLES WITH ADAPTED PLUGS**



|       |             |                       |                       |                |
|-------|-------------|-----------------------|-----------------------|----------------|
| Date  | 04 July '05 | PCP                   | GG/Giovanni Graffitti | SH/Sergio Hike |
| MADE  | 04 July '05 | GG/Giovanni Graffitti |                       |                |
| CHKD. | 04 July '05 |                       |                       |                |
| APPV. | 04 July '05 |                       |                       |                |

UNIT COOLERS  
 ALFA-CUBIC TYPE  
 & OPTIGO CC

ELECTRICAL EQUIPMENT  
 FOR FAN MOTOR AND ELECTRICAL DEFROST  
 DIMENSIONAL DRAWING & CONNECTIONS

|           |              |       |         |              |
|-----------|--------------|-------|---------|--------------|
| OBJECT    | PROJECT #    | DCC   | IPG Cnt | CNT          |
| PROJECT # | AS-DRAWING # | SHEET | 06      | OF SHEETS 14 |
|           | SMXA011      |       |         | REV. E       |

This page and next one show the electric defrost connection box valid for all the models of series 400 and 500

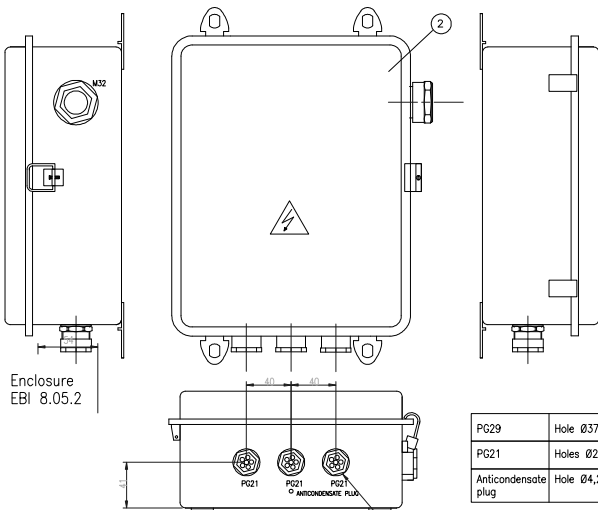
### Legend

2 Connection Box for electric defrost (JB-2)

### Technical Data

Material : Metal  
 IP Protection Class : Min IP 55  
 Colour : Grey RAL 7032  
 Insulation Class : I  
 Ambient Temp. : Min -25°C Max +50° C  
 Weight : Approx. 4kg

- 1: 1 Passacavo Pg21 in ottone nichelato IP66
- 2: Cavo flessibile sez. 16mmq isolato in gamma silicone completi di capicorda
- 3: Morsetteria di distribuzione 4x125A (art. Legrand 0048 86)
- 4: Cassetta metallica 8.05.2.1.1.00 marca EBI
- 5: Passacavo PG29 in ottone nichelato IP66
- 6: Morsetteria 16 mmq marca WIELAND
- 7: Cavo G/V completo di occhiello



|                    |            |
|--------------------|------------|
| PG29               | Hole Ø37   |
| PG21               | Holes Ø27  |
| Anticorrosate plug | Hole Ø4,25 |

### NOTE :

- (1) All the cable glands are made in brass.  
 On the side is mounted a PG29 plastic plug and the PG29 cable gland is supplied to the inside of the switchboard.

BRASS MULTIPLE CABLE GLAND IP54  
 WITH PVC SEAL WITH 6 HOLES #4mm  
**IMPORTANT:** CLOSE THE FREE HOLES WITH ADAPTED PLUGS



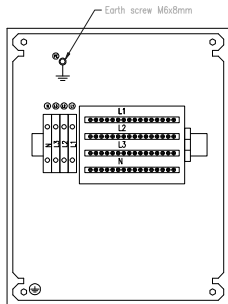
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| Date   | 04 July '05 | PCP                   |
| MADE   | 04 July '05 | GG/Giovanni Graffitti |
| CHKD.  | 04 July '05 | SH/Sergio Hike        |
| APPVD. | 04 July '05 |                       |

UNIT COOLERS  
 ALFA-CUBIC TYPE  
 & OPTIGO CC

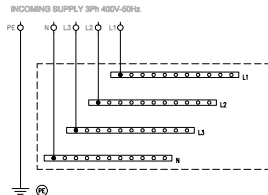
ELECTRICAL EQUIPMENT  
 FOR FAN MOTOR AND ELECTRICAL DEFROST  
 DIMENSIONAL DRAWING & CONNECTIONS

|         |             |              |      |
|---------|-------------|--------------|------|
| OBJECT  | PROJECT #   | AS-DRAWING # | REV. |
| SMXA011 |             |              | E    |
| DATE    | 04 July '05 |              |      |
| SCALE   |             |              |      |
| SHEET   | 07          | OF           | 14   |

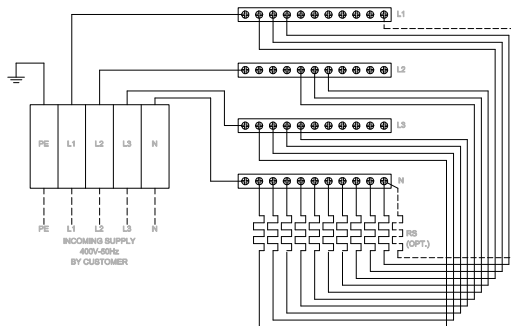
**INTERNAL VIEW**



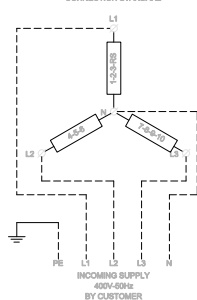
**WIRING DIAGRAM**



**CONNECTION DIAGRAM**



**CONNECTION STANDARD**



|        |             |                       |       |
|--------|-------------|-----------------------|-------|
| /      | Date        | CAD                   | SCALE |
| MADE   | 04 July '05 | PCP                   |       |
| CHKD.  | 04 July '05 | GG/Giovanni Graffitti |       |
| APPVD. | 04 July '05 | SH/Sergio Hike        |       |

UNIT COOLERS  
ALFA-CUBIC TYPE  
& OPTIGO CC

ELECTRICAL EQUIPMENT  
FOR FAN MOTOR AND ELECTRICAL DEFROST  
DIMENSIONAL DRAWING & CONNECTIONS

|           |              |         |          |       |
|-----------|--------------|---------|----------|-------|
| OBJECT    | .....        | DCC     | Pg. Cnt. | CNT   |
| LN1       | 03           | SHEET   | 08       | OF 14 |
| PROJECT # | A3-DRAWING # | SMXA011 | REV.     | E     |



## Valid for fan ring heater connection

### Legend

3 Connection Box for fan ring heater (JB-3)

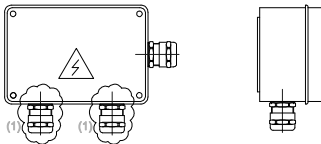
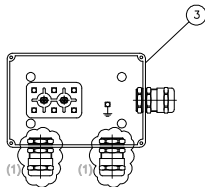
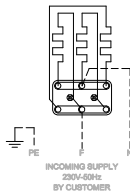
### Technical Data

Material : Plastic  
 IP Protection Class : Min IP 55  
 Colour : Grey RAL 7035  
 Insulation Class : II  
 Ambient Temp. : Min -25°C Max +50° C  
 Weight : Approx. 0,5kg

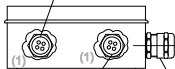
### CONNECTION DIAGRAM

N°1 CONNECTION BOX FOR MODELS:  
251-352-353 / 351-352-353 / 401-402

N°2 CONNECTION BOXES FOR MODELS:  
354 / 403



Electric element drain line  
Polyamide cable gland M20



Incoming supply  
Polyamide cable gland M20

Electric defrost  
Polyamide cable gland M20

#### NOTE :

- (1) POLYAMIDE MULTIPLE CABLE GLAND IP54 WITH PVC SEAL WITH 4 HOLES Ø3mm  
**IMPORTANT: CLOSE THE FREE HOLES WITH ADAPTED PLUGS**



|        |             |                       |
|--------|-------------|-----------------------|
| Date   | 04 July '05 | PCP                   |
| MADE   | 04 July '05 | GG/Giovanni Graffitti |
| CHKD.  | 04 July '05 | SH/Sergio Hike        |
| APPVD. | 04 July '05 |                       |

UNIT COOLERS  
ALFA-CUBIC TYPE  
& OPTIGO CC

ELECTRICAL EQUIPMENT  
FOR FAN MOTOR AND ELECTRICAL DEFROST  
DIMENSIONAL DRAWING & CONNECTIONS

|        |              |       |           |
|--------|--------------|-------|-----------|
| OBJECT | PROJECT #    | DCC   | Pg. Cnt.  |
| LN3    | AS-DRAWING # | SHEET | number    |
|        |              | 09    | 14        |
|        |              |       | OF SHEETS |
|        |              |       | REV.      |
|        |              |       | E         |

SMXA011

PRODUCTS RANGE (UNIT COOLERS – ALFACUBIC GL RL BL TYPE – OPTIGO CC) FAN MOTORS

| MODEL    |           |           |           | FAN DIAMETER (mm) | CONNECTION (1/230V-50Hz) |      |       |       |
|----------|-----------|-----------|-----------|-------------------|--------------------------|------|-------|-------|
|          |           |           |           |                   | n° motor                 | Mod. | P (W) | I (A) |
| GLE251A4 | RLE251A55 | BLE251A70 | OPTIGO CC | 250               | 1                        | ..   | 120   | 0.53  |
| GLE251B4 | RLE251B55 | BLE251B70 | OPTIGO CC | 250               | 1                        | ..   | 120   | 0.53  |
| GLE252A4 | RLE252A55 | BLE252A70 | OPTIGO CC | 250               | 2                        | ..   | 240   | 1.06  |
| GLE252B4 | RLE252B55 | BLE252B70 | OPTIGO CC | 250               | 2                        | ..   | 240   | 1.06  |
| GLE253A4 | RLE253A55 | BLE253A70 | OPTIGO CC | 250               | 3                        | ..   | 360   | 1.59  |
| GLE253B4 | RLE253B55 | BLE253B70 | OPTIGO CC | 250               | 3                        | ..   | 360   | 1.59  |
| GLE351A4 | RLE351A55 | BLE351A70 | OPTIGO CC | 350               | 1                        | ..   | 160   | 0.7   |
| GLE351B4 | RLE351B55 | BLE351B70 | OPTIGO CC | 350               | 1                        | ..   | 160   | 0.7   |
| GLE352A4 | RLE352A55 | BLE352A70 | OPTIGO CC | 350               | 2                        | ..   | 320   | 1.4   |
| GLE352B4 | RLE352B55 | BLE352B70 | OPTIGO CC | 350               | 2                        | ..   | 320   | 1.4   |
| GLE353A4 | RLE353A55 | BLE353A70 | OPTIGO CC | 350               | 3                        | ..   | 480   | 2.1   |
| GLE353B4 | RLE353B55 | BLE353B70 | OPTIGO CC | 350               | 3                        | ..   | 480   | 2.1   |
| GLE354A4 | RLE354A55 | BLE354A70 | OPTIGO CC | 350               | 4                        | ..   | 640   | 2.8   |
| GLE354B4 | RLE354B55 | BLE354B70 | OPTIGO CC | 350               | 4                        | ..   | 640   | 2.8   |

| MODEL    |           |           |           | FAN DIAMETER (mm) | CONNECTION (1/230V-50Hz) |      |       |       |
|----------|-----------|-----------|-----------|-------------------|--------------------------|------|-------|-------|
|          |           |           |           |                   | n° motor                 | Mod. | P (W) | I (A) |
| GLE401B4 | RLE401B55 | BLE401B70 | OPTIGO CC | 400               | 1                        | ..   | 190   | 0.8   |
| GLE401C4 | RLE401C55 | BLE401C70 | OPTIGO CC | 400               | 1                        | ..   | 190   | 0.8   |
| GLE402B4 | RLE402B55 | BLE402B70 | OPTIGO CC | 400               | 2                        | ..   | 380   | 1.6   |
| GLE402C4 | RLE402C55 | BLE402C70 | OPTIGO CC | 400               | 2                        | ..   | 380   | 1.6   |
| GLE403B4 | RLE403B55 | BLE403B70 | OPTIGO CC | 400               | 3                        | ..   | 570   | 2.4   |
| GLE403C4 | RLE403C55 | BLE403C70 | OPTIGO CC | 400               | 3                        | ..   | 570   | 2.4   |
| GLE502A4 | RLE502A55 | BLE502A70 | OPTIGO CC | 500               | 2                        | ..   | 1540  | 6.8   |
| GLE502B4 | RLE502B55 | BLE502B70 | OPTIGO CC | 500               | 2                        | ..   | 1540  | 6.8   |
| GLE502C4 | RLE502C55 | BLE502C70 | OPTIGO CC | 500               | 2                        | ..   | 1540  | 6.8   |
| GLE503B4 | RLE503B55 | BLE503B70 | OPTIGO CC | 500               | 3                        | ..   | 2310  | 10.2  |
| GLE503C4 | RLE503C55 | BLE503C70 | OPTIGO CC | 500               | 3                        | ..   | 2310  | 10.2  |
| GLE504B4 | RLE504B55 | BLE504B70 | OPTIGO CC | 500               | 4                        | ..   | 3080  | 13.6  |
| GLE504C4 | RLE504C55 | BLE504C70 | OPTIGO CC | 500               | 4                        | ..   | 3080  | 13.6  |



|       |             |                |                       |
|-------|-------------|----------------|-----------------------|
| Date  | 04 July '05 | SCALE          | PCP                   |
| MADE  | 04 July '05 | CHD.           | GG/Giovanni Graffitti |
| APPVD | 04 July '05 | SH/Sergio Hike |                       |

UNIT COOLERS  
ALFA-CUBIC TYPE  
& OPTIGO CC

ELECTRICAL EQUIPMENT  
FOR FAN MOTOR AND ELECTRICAL DEFROST  
TECHNICAL DESCRIPTION

|           |              |        |       |           |    |
|-----------|--------------|--------|-------|-----------|----|
| OBJECT    | .....        | DCC    | ..... | Pg. Cnt.  | 14 |
| LN. SB    | .....        | DR. C. | ..... | SHEET     | 10 |
| PROJECT # | AS-DRAWING # | REV.   | ..... | OF SHEETS | 14 |
|           | SMXA011      |        |       |           | E  |

PRODUCTS RANGE (UNIT COOLERS - ALFACUBIC GL-RL-BL TYPE - OPTIGO CC)

GL-RL-BL TYPE - OPTIGO CC - OPTIONALS

| MODEL    |           |          |                  | ELECTRIC DEFROST |      |       |           |      |       | ELECTRIC ELEMENT DRAIN LINE |
|----------|-----------|----------|------------------|------------------|------|-------|-----------|------|-------|-----------------------------|
|          |           |          |                  | n° heater        | Mod. | P (W) | n° heater | Mod. | P (W) |                             |
| GLE251A4 | RLE251A55 | BLE251A7 | OPTIGO CC 251A   | 2                | RP   | 780   | 1         | RB   | 270   | 70                          |
| GLE251B4 | RLE251B55 | BLE251B7 | OPTIGO CC 251B/C | 3                | RP   | 1170  | 1         | RB   | 270   | 70                          |
| GLE252A4 | RLE252A55 | BLE252A7 | OPTIGO CC 252A   | 2                | RP   | 1560  | 1         | RB   | 540   | 70                          |
| GLE252B4 | RLE252B55 | BLE252B7 | OPTIGO CC 252B/C | 3                | RP   | 2340  | 1         | RB   | 540   | 70                          |
| GLE253A4 | RLE253A55 | BLE253A7 | OPTIGO CC 253A   | 2                | RP   | 2360  | 1         | RB   | 800   | 70                          |
| GLE253B4 | RLE253B55 | BLE253B7 | OPTIGO CC 253B/C | 3                | RP   | 3540  | 1         | RB   | 800   | 70                          |
| GLE351A4 | RLE351A55 | BLE351A7 | OPTIGO CC 351A   | 3                | RP   | 1170  | 1         | RB   | 270   | 70                          |
| GLE351B4 | RLE351B55 | BLE351B7 | OPTIGO CC 351B/C | 4                | RP   | 1560  | 1         | RB   | 270   | 70                          |
| GLE352A4 | RLE352A55 | BLE352A7 | OPTIGO CC 352A   | 3                | RP   | 2340  | 1         | RB   | 540   | 70                          |
| GLE352B4 | RLE352B55 | BLE352B7 | OPTIGO CC 352B/C | 4                | RP   | 3120  | 1         | RB   | 540   | 70                          |
| GLE353A4 | RLE353A55 | BLE353A7 | OPTIGO CC 353A   | 3                | RP   | 3540  | 1         | RB   | 800   | 70                          |
| GLE353B4 | RLE353B55 | BLE353B7 | OPTIGO CC 353B/C | 4                | RP   | 4720  | 1         | RB   | 800   | 70                          |
| GLE354A4 | RLE354A55 | BLE354A7 | OPTIGO CC 354A   | 3                | RP   | 4710  | 1         | RB   | 800   | 70                          |
| GLE354B4 | RLE354B55 | BLE354B7 | OPTIGO CC 354B/C | 4                | RP   | 6280  | 1         | RB   | 800   | 70                          |



|        |             |                       |
|--------|-------------|-----------------------|
| Date   | 04 July '05 | PCP                   |
| CHKD.  | 04 July '05 | GG/Giovanni Graffitti |
| APPVD. | 04 July '05 | SH/Sergio Hike        |

UNIT COOLERS  
ALFA-CUBIC TYPE  
& OPTIGO CC

ELECTRICAL EQUIPMENT  
FOR FAN MOTOR AND ELECTRICAL DEFROST  
TECHNICAL DESCRIPTION

|        |              |          |                 |
|--------|--------------|----------|-----------------|
| OBJECT | PROJECT #    | DCC      | Pg. Cnt. number |
| LN1    | AS-DRAWING # | SHEET 11 | OF SHEETS 14    |
| REV.   | SMXA011      |          | E               |

PRODUCTS RANGE (UNIT COOLERS - ALFACUBIC GL-RL-BL TYPE)

GL-RL-BL TYPE - OPTIONALS

| MODEL    |           |           | ELECTRIC DEFROST |      |       |           |      |       | ELECTRIC ELEMENT<br>DRAIN LINE |
|----------|-----------|-----------|------------------|------|-------|-----------|------|-------|--------------------------------|
|          |           |           | n° heater        | Mod. | P (W) | n° heater | Mod. | P (W) |                                |
| GLE401B4 | RLE401B55 | BLE401B7  | 7                | RP   | 3150  | 1         | RB   | 450   | 100                            |
| GLE401C4 | RLE401C55 | BLE401C7  | 9                | RP   | 4050  | 1         | RB   | 450   | 100                            |
| GLE402B4 | RLE402B55 | BLE402B7  | 7                | RP   | 6300  | 1         | RB   | 900   | 100                            |
| GLE402C4 | RLE402C55 | BLE402C7  | 9                | RP   | 8100  | 1         | RB   | 900   | 100                            |
| GLE403B4 | RLE403B55 | BLE403B7  | 7                | RP   | 8750  | 1         | RB   | 1250  | 100                            |
| GLE403C4 | RLE403C55 | BLE403C7  | 9                | RP   | 11250 | 1         | RB   | 1250  | 100                            |
| GLE502A4 | RLE502A55 | BLE502A70 | 4                | RP   | 6400  | 2         | RB   | 3200  | 100                            |
| GLE502B4 | RLE502B55 | BLE502B70 | 6                | RP   | 9600  | 2         | RB   | 3200  | 100                            |
| GLE502C4 | RLE502C55 | BLE502C70 | 8                | RP   | 12800 | 2         | RB   | 3200  | 100                            |
| GLE503B4 | RLE503B55 | BLE503B70 | 6                | RP   | 16800 | 2         | RB   | 5600  | 100                            |
| GLE503C4 | RLE503C55 | BLE503C70 | 8                | RP   | 22400 | 2         | RB   | 5600  | 100                            |
| GLE504B4 | RLE504B55 | BLE504B70 | 6                | RP   | 20800 | 2         | RB   | 5200  | 100                            |
| GLE504C4 | RLE504C55 | BLE504C70 | 8                | RP   | 26000 | 2         | RB   | 5200  | 100                            |



|        |             |                       |       |
|--------|-------------|-----------------------|-------|
| /      | Date        | CAD                   | SCALE |
| MADE   | 04 July '05 | PCP                   |       |
| CHKD.  | 04 July '05 | GG/Giovanni Graffitti |       |
| APPVD. | 04 July '05 | SH/Sergio Hike        |       |

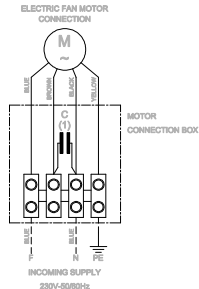
UNIT COOLERS  
ALFA-CUBIC TYPE  
& OPTIGO CC

ELECTRICAL EQUIPMENT  
FOR FAN MOTOR AND ELECTRICAL DEFROST  
TECHNICAL DESCRIPTION

|           |              |       |          |              |
|-----------|--------------|-------|----------|--------------|
| OBJECT    | .....        | DCC   | Pg. Cnt. | CNT          |
| LINE      | .....        | SHEET | 12       | OF SHEETS 14 |
| PROJECT # | AS-DRAWING # | REV.  |          |              |
|           | SMXA011      | E     |          |              |

# ELECTRIC FAN MOTORS CONNECTION DIAGRAM

## ALFA-CUBIC SERIES 250-350

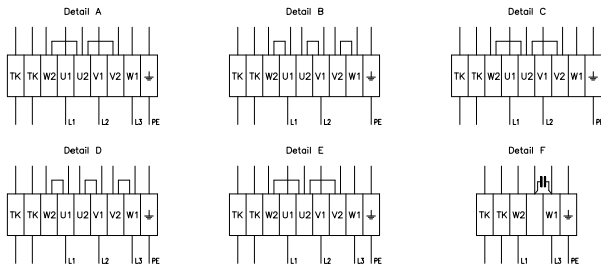


**NOTE :**  
(1) CONDENSER INCLUDED IN MOTOR'S CONNECTION BOX;  
ITS CAPACITY DEPEND FROM THE SIZE OF THE MOTOR

## CODE & COLOUR TABLE

| Colour Code | E (ENGLISH)  | I (ITALIAN)  |
|-------------|--------------|--------------|
| BK          | BLACK        | NERO         |
| BL          | BLUE         | BLU          |
| BR          | BROWN        | MARRONE      |
| GR          | GREY         | GRIGIO       |
| OR          | ORANGE       | ARANCIONE    |
| RD          | RED          | ROSSO        |
| WH          | WHITE        | BIANCO       |
| Y/G         | YELLOW/GREEN | GIALLO/VERDE |

## ALFA-CUBIC SERIES 400-500



### ELECTRIC MOTOR CONNECTION BOX

| Supply               | Convec. | Detail   | Speed |
|----------------------|---------|----------|-------|
| 3 phase single speed |         |          |       |
| 3ph 400V-50Hz        | Y       | Detail A | High  |
| 3ph 230V-50Hz        | Δ       | Detail B | High  |
| 3ph 230V-50Hz        | Y       | Detail C | Low   |
| 3 phase double speed |         |          |       |
| 3ph 400V-50Hz        | Y       | Detail E | Low   |
| 3ph 400V-50Hz        | Δ       | Detail D | High  |
| Single phase         |         |          |       |
| 1ph 230V-50Hz        | /       | Detail F | High  |



|        |             |                       |
|--------|-------------|-----------------------|
| Date   | 04 July '05 | PCP                   |
| CHKD.  | 04 July '05 | GG/Giovanni Graffitti |
| APPVD. | 04 July '05 | SH/Sergio Hike        |

UNIT COOLERS  
ALFA-CUBIC TYPE  
& OPTIGO CC

ELECTRICAL EQUIPMENT  
FOR FAN MOTOR AND ELECTRICAL DEFROST  
TECHNICAL DESCRIPTION

|                |              |       |               |              |
|----------------|--------------|-------|---------------|--------------|
| OBJECT         | .....        | DCC   | Pg. n. number | CNT          |
| REV. n. number | .....        | SHEET | 13            | OF SHEETS 14 |
| PROJECT #      | AS-DRAWING # | REV.  | SMXA011       | E            |

|   | 1   | 2                     | 3                     | 4      | 5    | 6           | 7           | 8      | 9 |
|---|---|-----------------------|-----------------------|--------|------|-------------|-------------|--------|---|
|   | TYPE  | CON.POINT A           | CON.POINT B           | REMARK | TYPE | CON.POINT A | CON.POINT B | REMARK |   |
| A | <u>Basic Design (currents in according to order) SERIES 250-350</u> |                       |                       |        |      |             |             |        |   |
|   | UNIDRALL 4000 3x1.5   | (Customer-Fan Motor)  | Connection Box (JB-1) | *      |      |             |             |        |   |
| B | UNIDRALL 4000 3x1.5   | Connection Box (JB-1) | Fan Motor             |        |      |             |             |        |   |
| C | <u>Basic Design (currents in according to order) SERIES 400-500</u> |                       |                       |        |      |             |             |        |   |
|   | UNIDRALL 4000 6x1.5   | (Customer-Fan Motor)  | Connection Box (JB-1) | *      |      |             |             |        |   |
|   | UNIDRALL 4000 6x1.5   | Connection Box (JB-1) | Fan Motor             |        |      |             |             |        |   |

Other equivalent and approved cables may be used.

Conductors are in red copper in according to cl.5 DIN VDE 0295 and IEC 228  
The sheath is in special PUR outer jacket according to DIN 53515/53504 and VDE 0282 pt.10

Code designations for cables obtainable through cable producers Unika (Italy) or equivalent.

Where C is indicated it should be a Screened version, with PVC inner jacket and braid of tinned copper cover 85%, with the shield properly connected to earth as shown in the electrical drawings.

For other connections an armoured cable may be used, provided the armour is connected to earth as shown in the electrical drawings and gives sufficient EMC protection. Copper or Aluminium Wire Armouring is normally used.

\* Cable not included in the Alfa Laval supply.  
Cable is designed for max distance of 40mt far from module



|       |             |                       |       |
|-------|-------------|-----------------------|-------|
| /     | Date        | CAD                   | SCALE |
| MADE  | 04 July '05 | PCP                   |       |
| CHKD. | 04 July '05 | GG/Giovanni Graffitti |       |
| APPVD | 04 July '05 | SH/Sergio Hike        |       |

UNIT COOLERS  
ALFA-CUBIC TYPE  
& OPTIGO CC

ELECTRICAL EQUIPMENT  
FOR FAN MOTOR AND ELECTRICAL DEFROST  
CABLES LIST

|           |              |       |          |              |
|-----------|--------------|-------|----------|--------------|
| OBJECT    | .....        | DCC   | Pg. Cnt. | CNT          |
| LN#       | Sheet        | SHEET | 14       | OF SHEETS 14 |
| PROJECT # | AS-DRAWING # | REV.  |          |              |
|           | SMXA011      | E     |          |              |