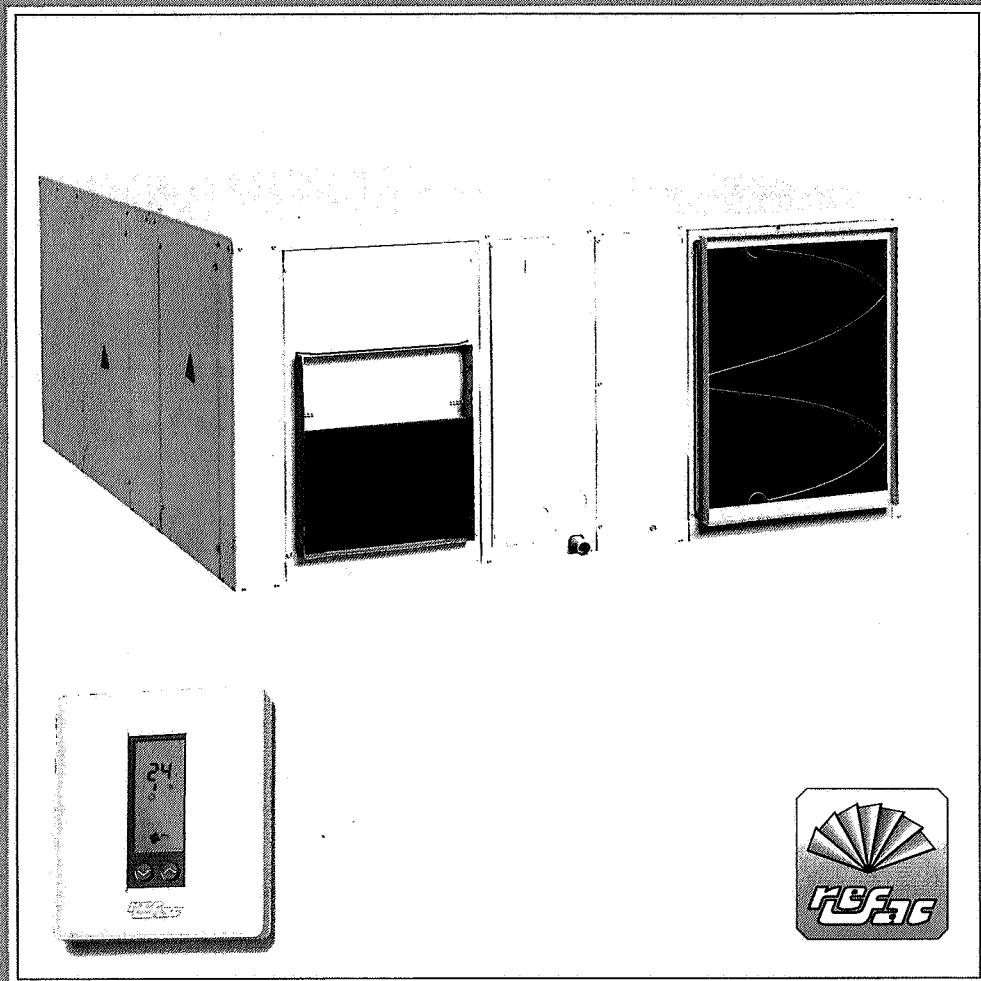


# FLATAIR FL/B

compacte luchtgekoelde airconditioners  
capaciteitsrange van 7 tot 28 kW

85 86



# Flatair FL/B

## Compacte Airconditioners voor binnen- of dakopstelling

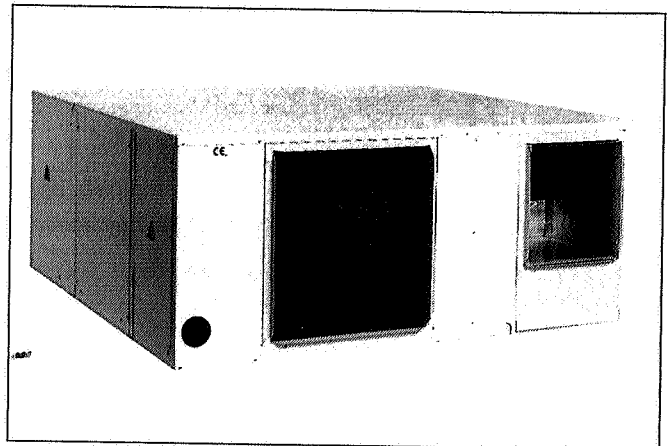
Refac introduceert een compleet vernieuwde range horizontale, packaged luchtgekoelde airconditioners, de Flatair FL/B. Door de opbouw van de capaciteitsrange van 7,8 tot 28,1 kW in 7 modellen, is altijd de passende Flatair voor uw toepassing te selecteren. De Flatair FL/B is tevens leverbaar in warmtepomp-uitvoering. Uniek is de mogelijkheid tot opsplitsing van het condensor- en verdampersgedeelte, waardoor een indoor condensing unit ontstaat. De veelzijdige aansluitmogelijkheden voor luchtkanalen aan zowel verdampers- als aan condensorzijde maken de Flatair FL/B uiterst flexibel in plaatsings- en toepassingsmogelijkheden.

### Kenmerken

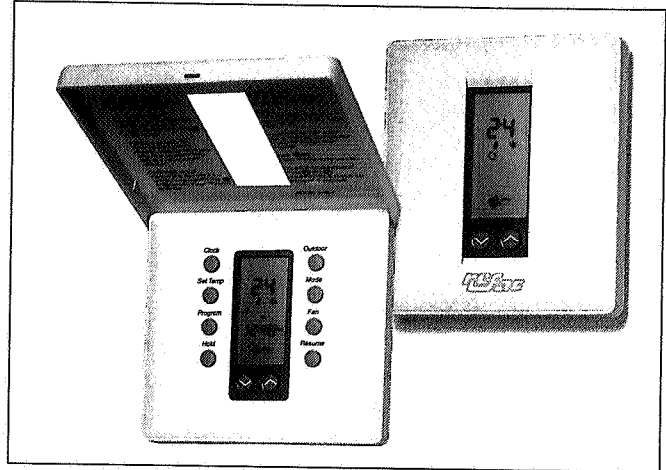
- capaciteitsrange 7,8 tot 28,1 kW, 7 modellen
- compacte afmetingen
- elektrisch paneel volgens NEN1010, unit voorzien van CE-merk
- warmwaterbatterij, E-verhitter, winterregeling (aan/uit of modulerend), afstandsbediening, etc. zijn opties.

### Refac Ruimtethermostaat

Dit is de nieuwe microprocessor gestuurde ruimtethermostaat. Leverbaar in 6 uitvoeringen, Alleen koelen, verwarmen, met of zonder klokprogramma. Voorzien van een gemakkelijk uitleesbaar LCD-display met continue weergave van de unitstatus. Zeer eenvoudig te bedienen en voorzien van oneindig veel mogelijkheden.



Condensorzijde voorzien van centrifugaal ventilator met hoge statische druk.



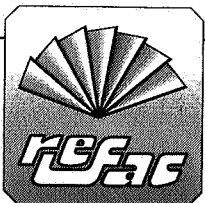
Geavanceerde Microprocessor besturing met LCD-display en tal van programmeermogelijkheden.

## TECHNISCHE GEGEVENS

Flatair FL Flatair FLB, Warmtepomp		2.8E	3E	4E	5E	7E	8E	10E
Koelcapaciteit, FL + FLB <sup>1</sup>	kW	7,8	8,9	11,8	14,1	18,3	22,3	28,1
Verwarmingscapaciteit, FLB <sup>2</sup>	kW	8,4	9,5	12,1	15,8	20,1	23,8	30,4
Luchthoeveelheid max./min.	m <sup>3</sup> /h	2600/1750		3000/1800	4100/2950	4520/3250	6200/5000	6100/4850
Beschikbare ext. statische druk <sup>3</sup>	Pa	130	130	110	150	170	170	180
Cond. luchthoeveelh. (max/min)	m <sup>3</sup> /h	3950/2800		3800/2800	5400/4250	5200/4100	7620/6180	7120/5750
Beschikbare ext. statische druk <sup>3</sup>	Pa	110	110	110	150	150	150	150
Totaal opgenomen vermogen	kW	3,73	3,76	4,88	8,13	9,54	11,49	14,55
Aanbevolen afzekerwaarde	A	20	25	25	35	35	50	50
Aansluitspanning		3 x 400V~50 Hz + N + PE						
Afmetingen L x B x H	mm	1315x1250x480		1395x1300x525	1395x1300x575	1475x1450x595	1865x1500x625	
Bedrijfsgewicht FL/FLB	kg	170	180	190	215	260	320	340

- 1) Ruimtetemperatuur van 27°C DB en 19°C NB; buitentemperatuur 35°C.
- 2) Ruimtetemperatuur 20°C DB; buitentemperatuur 7°C DB en 6°C NB.
- 3) Statische druk bij minimale luchthoeveelheid.

Wijzigingen voorbehouden



# ESQUEMAS ELECTRICOS

# 2

## FL

MODELOS	CODIGOS	TENSION	PAGINA
FL 2.8-3	3Z-33-371-024/247**	230/1/50	3
FL 3-4	3Z-33-372-071/247	230-400/3/50	4
FL 5-7-7N-8-10	3Z-33-374-019/277	230-400/3/50	5

## FLB

MODELOS	CODIGOS	TENSION	PAGINA
FLB 2.8-3	3Z-33-681-024/367	230/1/50	6
FLB 3-4	3Z-33-682-026/367	230-400/3/50	7
FLB 5	3Z-33-684-017/367	230-400/3/50	8
FLB 7-8-10	3Z-33-685-018/367	230-400/3/50	9
FLB 7N-8-10	3Z-33-685-209/367	230-400/3/50	10

## LVF

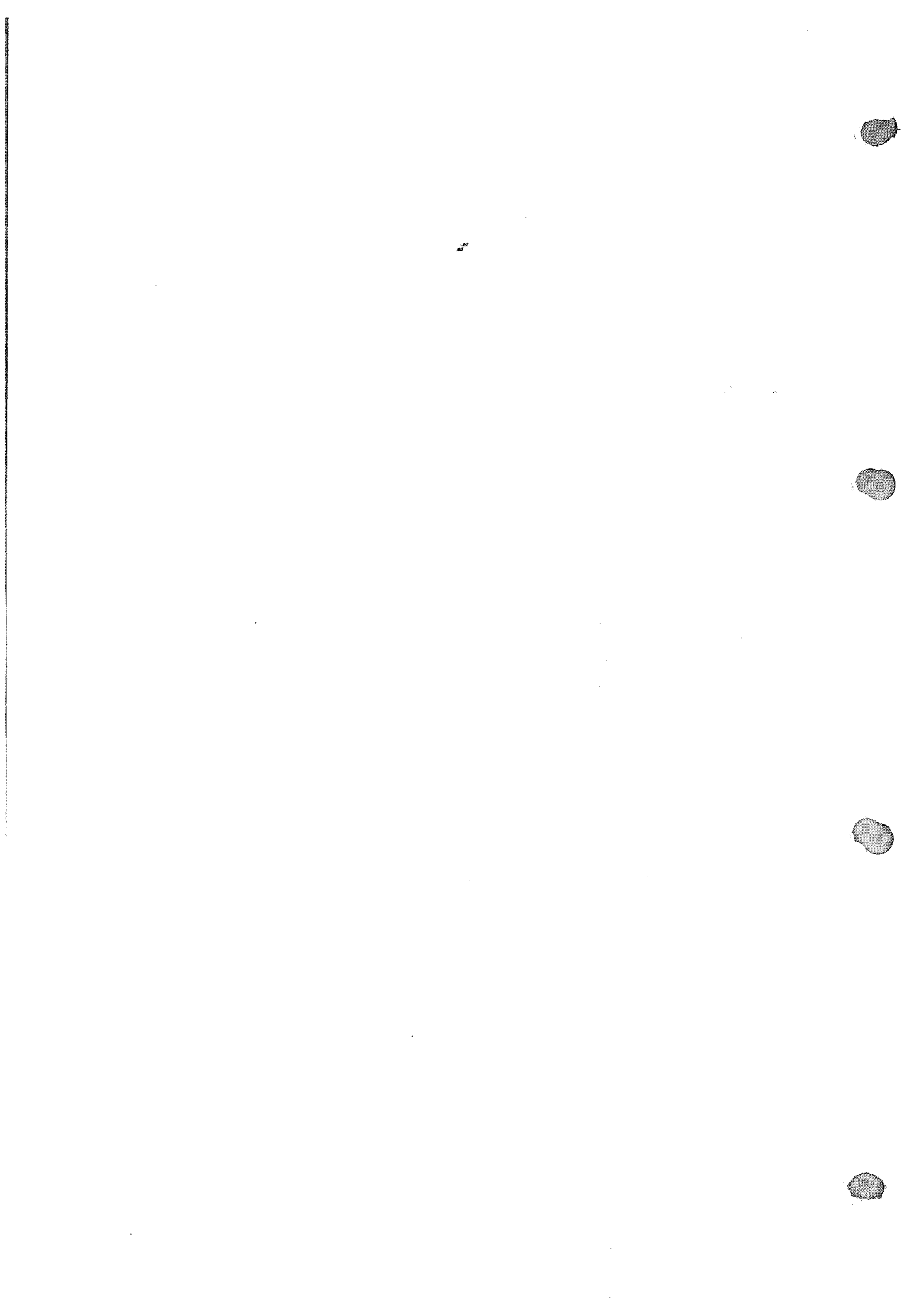
MODELOS	CODIGOS	TENSION	PAGINA
LVF 5E-7E	3Z-33-872-178/277	230-400/3/50	11
LVF 8E-10E-15E	3Z-33-875-164/277	230-400/3/50	12
LVF 10D a 30D	3Z-33-887-182/077	230-400/3/50	13

## BLV

MODELOS	CODIGOS	TENSION	PAGINA
BLV 5E-7E	3Z-33-472-179/277	230-400/3/50	14
BLV 8E-10E-15E	3Z-33-478-177/277	230-400/3/50	15
BLV 10D a 30D	3Z-33-487-206/077	230-400/3/50	16

## FLEXZONE

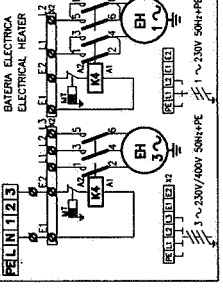
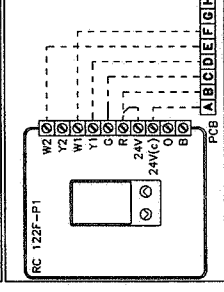
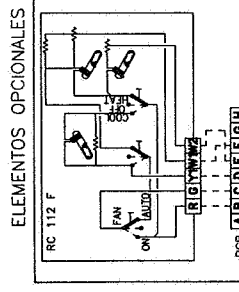
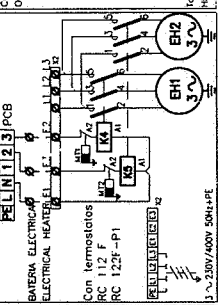
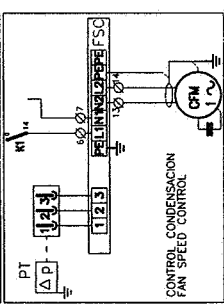
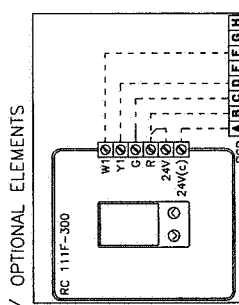
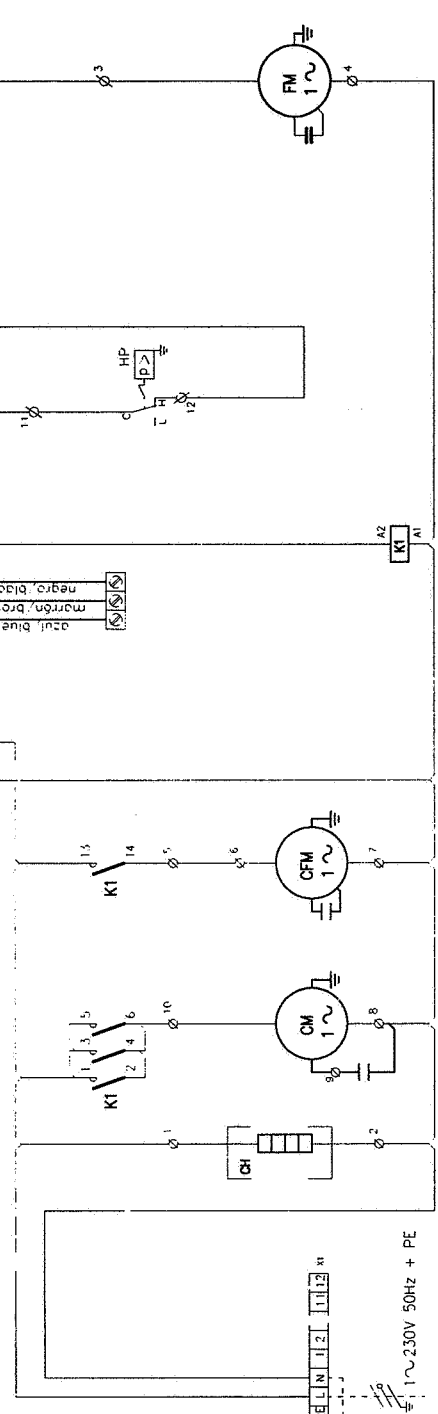
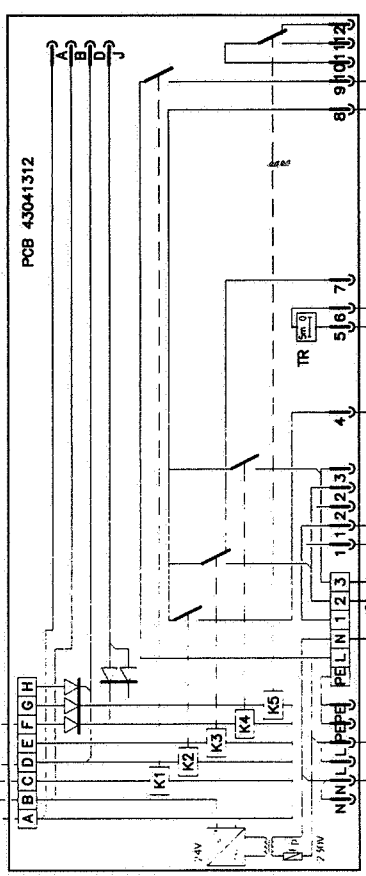
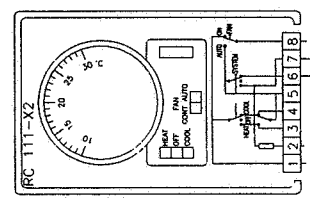
MODELOS	CODIGOS	TENSION	PAGINA
FLEXZONE LNF	3Z-33-300-014/327	230-400/3/50	17
FLEXZONE LNB	3Z-33-963-019/327	230-400/3/50	18
FLEXZONE FL/LVF-E	3Z-33-371-025/307	230-400/3/50	19
FLEXZONE FLB/BLV-E	3Z-33-681-025/327	230-400/3/50	20
FLEXZONE LVF-D	3Z-33-887-189/327	230-400/3/50	21
FLEXZONE BLV-D	3Z-33-487-214/327	230-400/3/50	22



# FL 2.8 - 3

- 95 Condenser Fan Motor
- 94 Crank Case Heater
- 93 Compressor Motor
- 92 Electric Heater
- 91 Thermal Protection
- 90 Internal Fan Motor
- 89 Fan Speed Control
- 88 High Pressure Presostat
- 87 Contactor
- 86 Security Thermostat
- 85 Printed Circuit Board
- 84 Pressure Transducer
- 83 Remote Control
- 82 Timer Delay

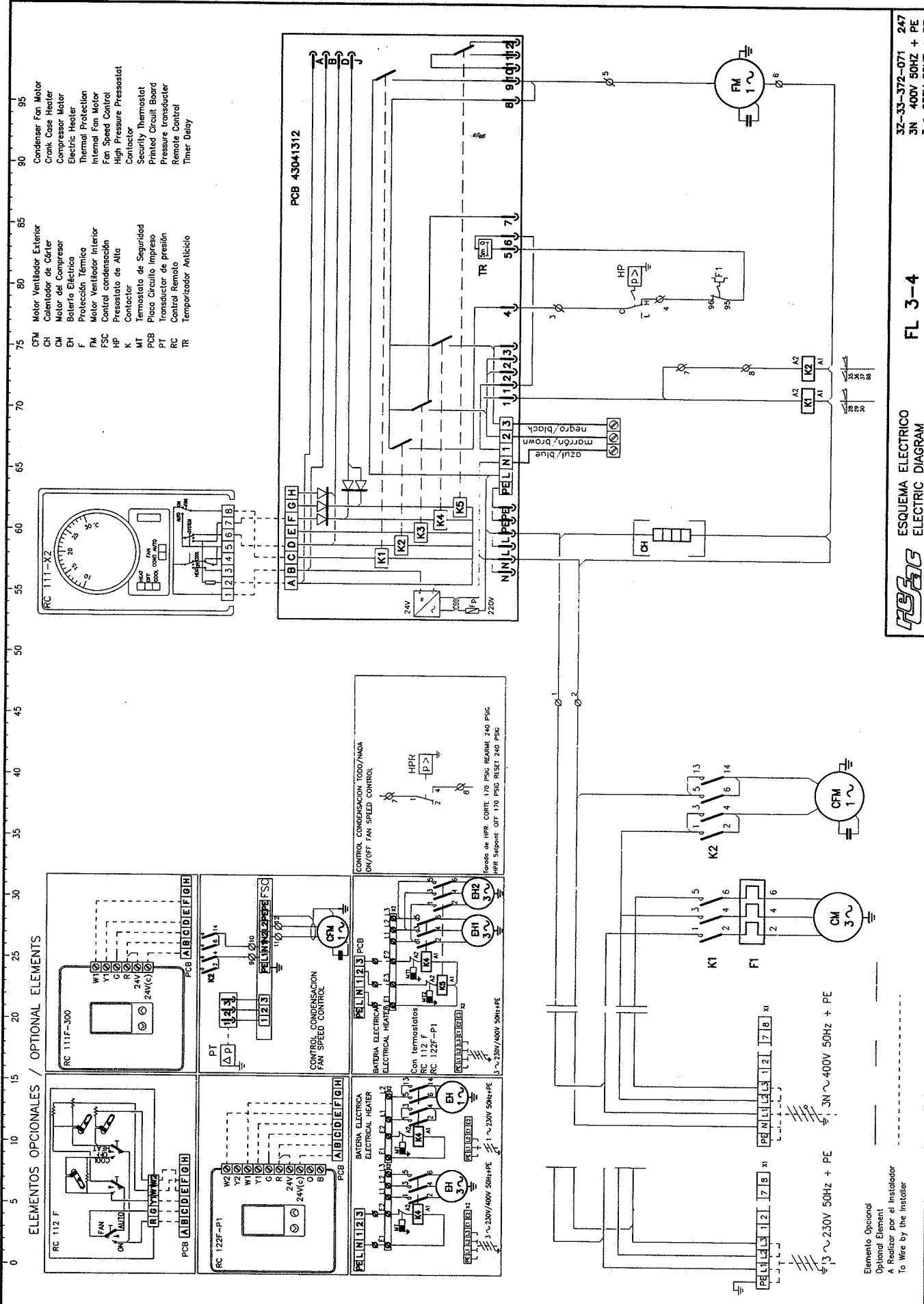
- 75 CTM Motor Ventilador Exterior
- 74 CH Calefactor de Carter
- 73 CM Motor del Compresor
- 72 EH Batería Eléctrica
- 71 F Protección Térmica
- 70 FM Motor Ventilador Interior
- 69 FSC Control condensación
- 68 HP Presostato de Alta
- 67 K Contactor
- 66 MT Termostato de Seguridad
- 65 PCB Pícaro Circuito Impreso
- 64 PT Transductor de presión
- 63 RC Control Remoto
- 62 TR Temporizador Anticiclo



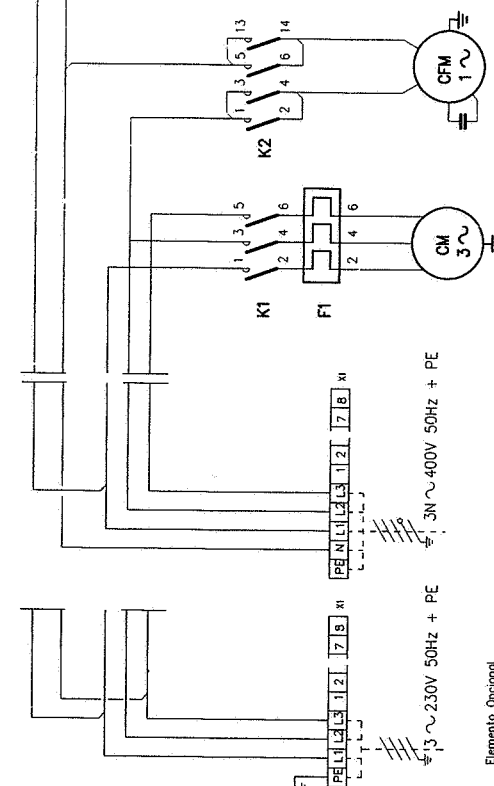
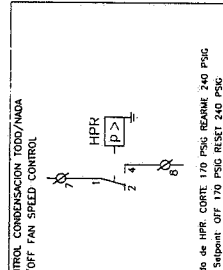
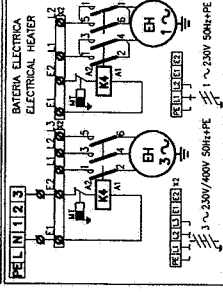
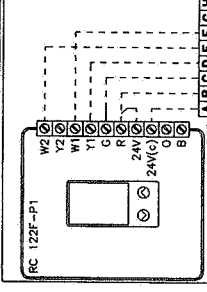
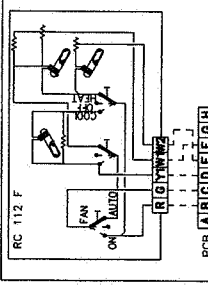
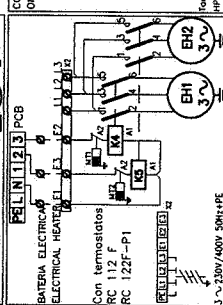
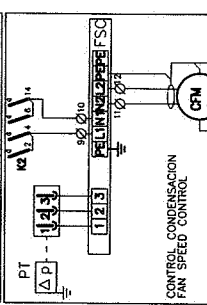
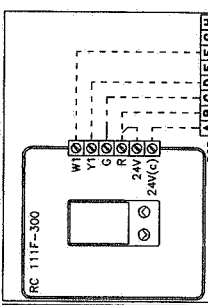
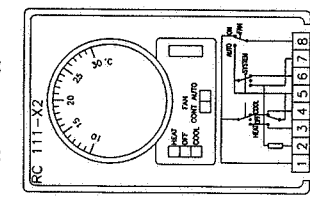
ELEMENTOS OPCIONALES / OPTIONAL ELEMENTS

Elemento Opcional  
 A Realizar por el Instalador  
 To Wire by the Installer

# FL 3 - 4



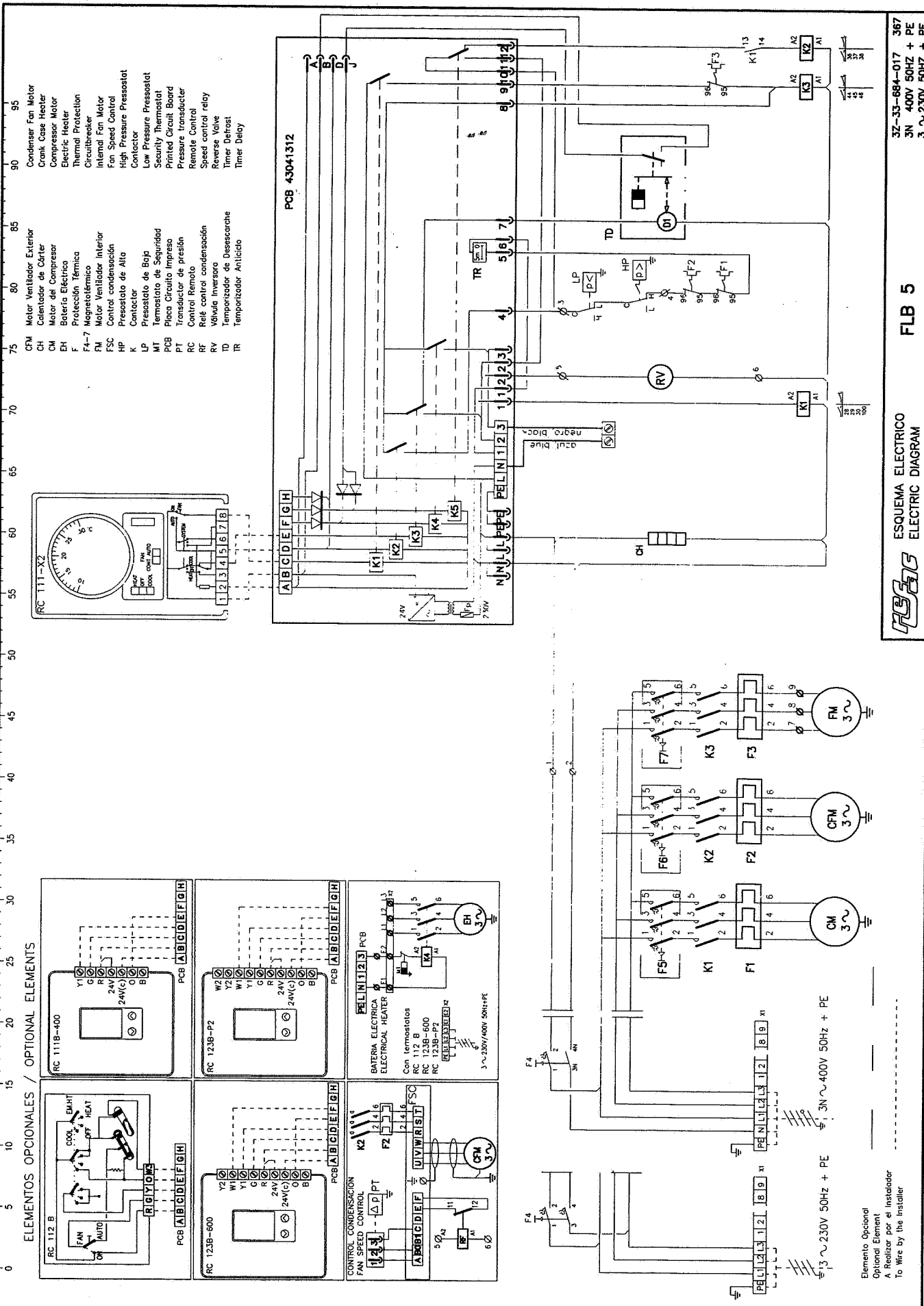
- |    |                           |
|----|---------------------------|
| 95 | Condenser Fan Motor       |
| 90 | Crank Case Heater         |
|    | Compressor Motor          |
|    | Electric Heater           |
|    | Thermal Protection        |
|    | Internal Fan Motor        |
|    | Fan Speed Control         |
|    | High Pressure Presostat   |
|    | Contacto                  |
|    | Security Thermostat       |
|    | Printed Circuit Board     |
|    | Pressure transducer       |
|    | Remote Control            |
|    | Timer Delay               |
| 85 |                           |
| 80 | Motor Ventilador Exterior |
|    | Calentador de Carter      |
|    | Motor del Compresor       |
|    | Batería Eléctrica         |
|    | Protección Térmica        |
|    | Motor Ventilador Interior |
|    | FSC Control               |
|    | Presostato de Alta        |
|    | Contacto                  |
|    | Termostato de Seguridad   |
|    | Placa Circuito Impreso    |
|    | Transductor de presión    |
|    | Control Remoto            |
|    | Temporizador Anticiclo    |
| 75 | CPM                       |
| 70 |                           |
| 65 |                           |
| 60 |                           |
| 55 |                           |
| 50 |                           |
| 45 |                           |
| 40 |                           |
| 35 |                           |
| 30 |                           |
| 25 |                           |
| 20 |                           |
| 15 |                           |
| 10 |                           |
| 5  |                           |



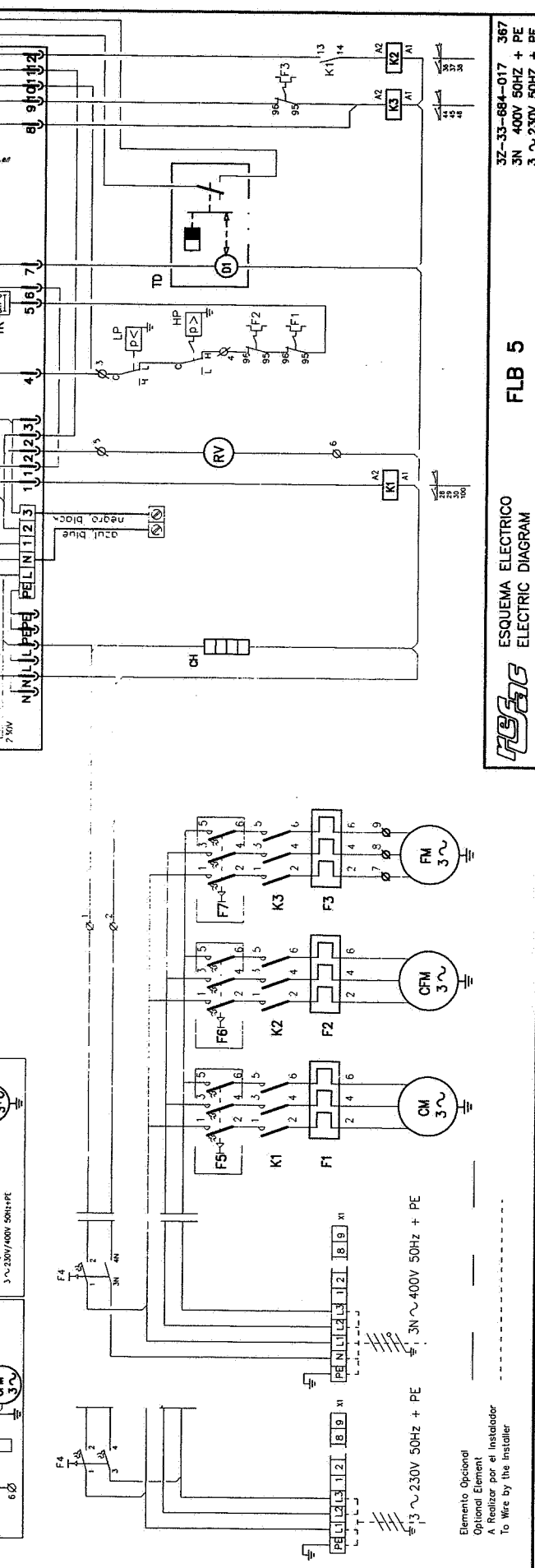
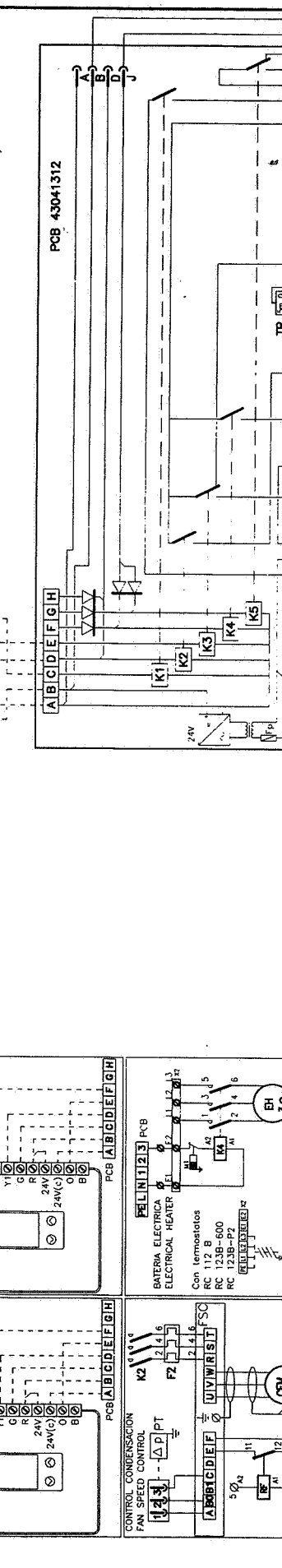
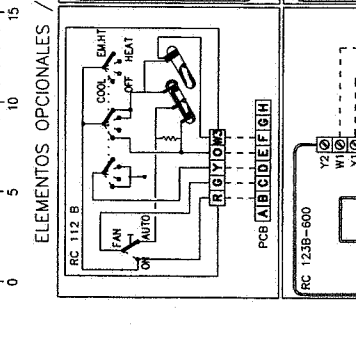
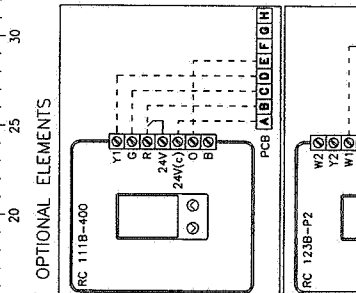
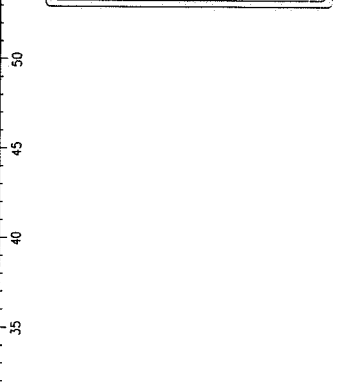
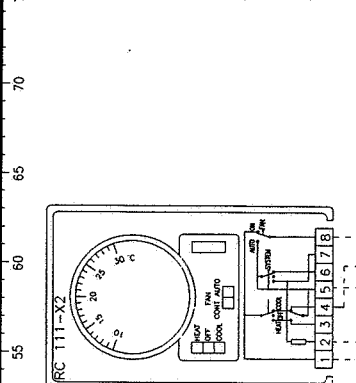
Elemento Opcional  
Optional Element  
A. Realizar por el Instalador  
To Wire by the Installer



# FLB 5



- |    |                          |
|----|--------------------------|
| 95 | Condenser Fan Motor      |
| 90 | Crank Case Heater        |
|    | Compressor Motor         |
|    | Electric Heater          |
|    | Thermal Protection       |
|    | Circuitbreaker           |
|    | Internal Fan Motor       |
|    | Fan Speed Control        |
|    | High Pressure Pressostat |
|    | Contactora               |
|    | Low Pressure Pressostat  |
|    | Security Thermostat      |
|    | Printed Circuit Board    |
|    | Pressure transducer      |
|    | Remote control relay     |
|    | Speed control relay      |
|    | Reverse Valve            |
|    | Timer Defrost            |
|    | Timer Delay              |



ESQUEMA ELECTRICO  
ELECTRIC DIAGRAM

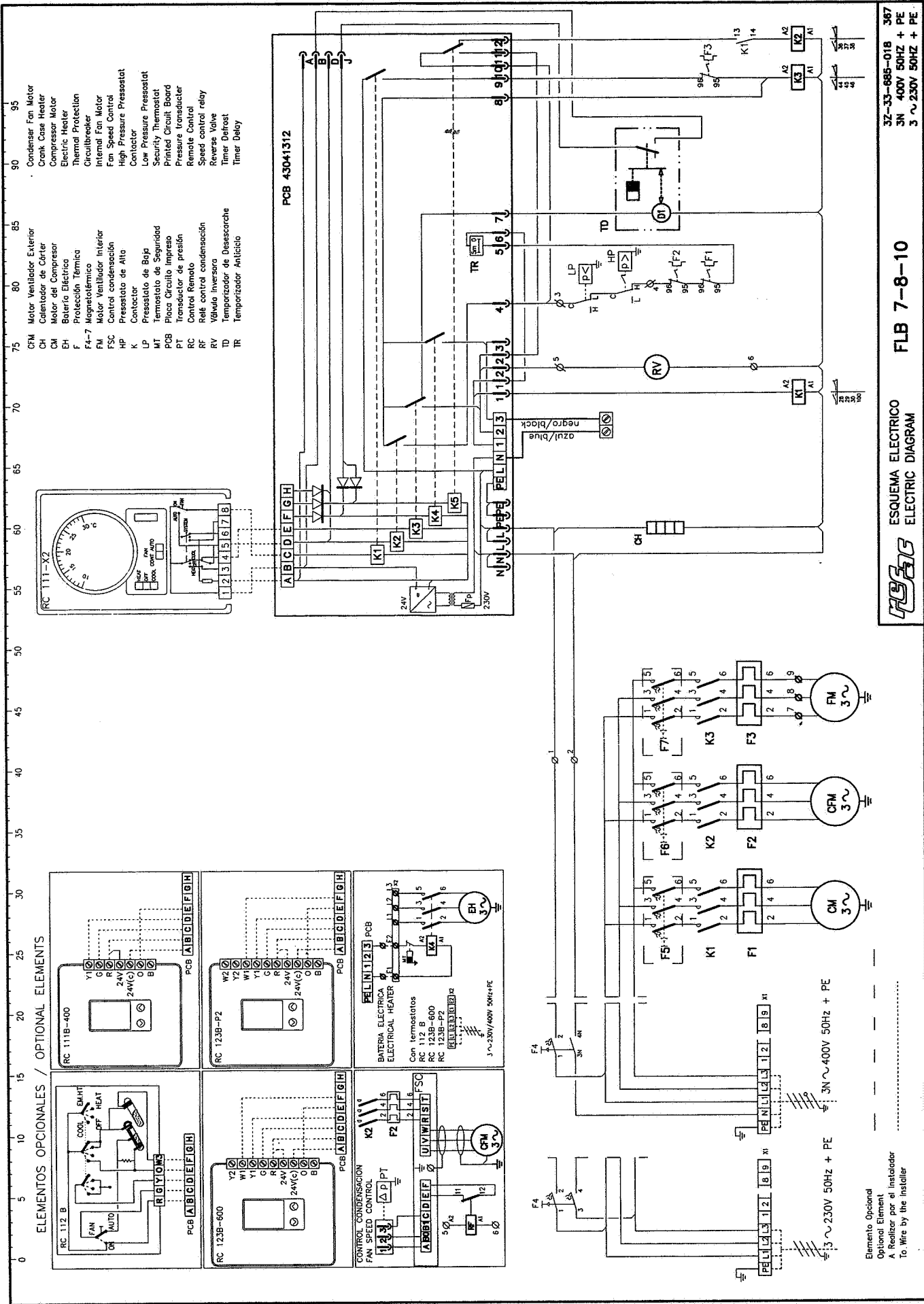
FLB 5

32-33-684-017 367  
3N 400V 50HZ + PE  
3 ~ 230V 50HZ + PE

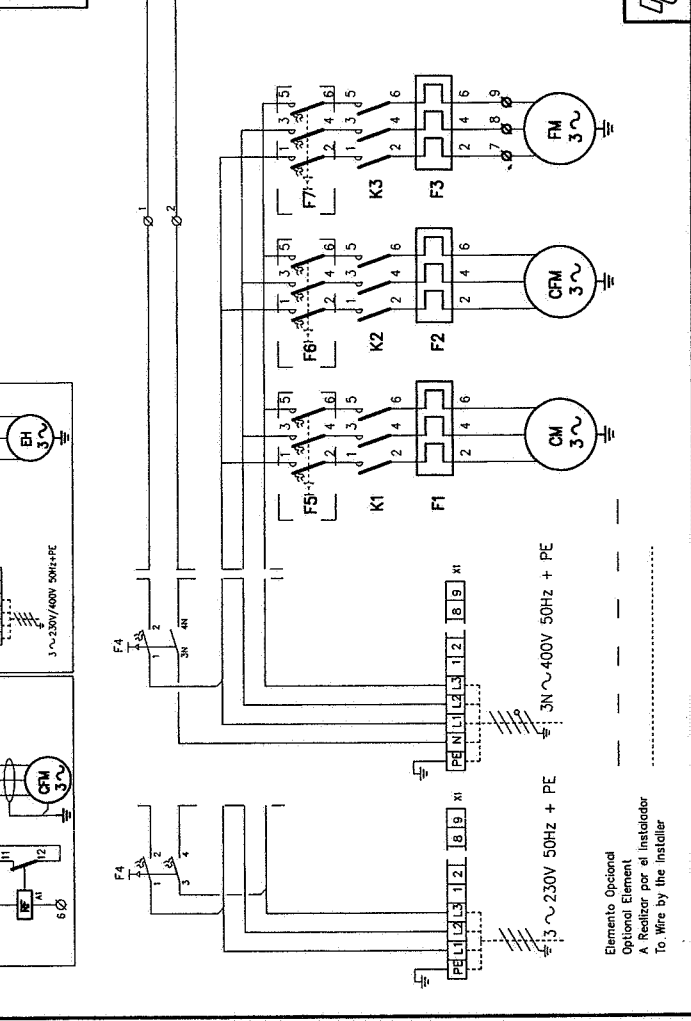
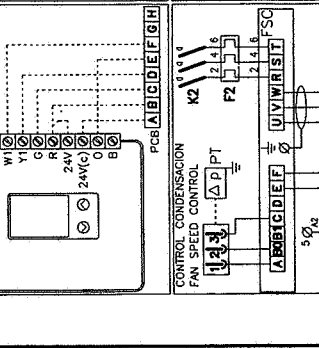
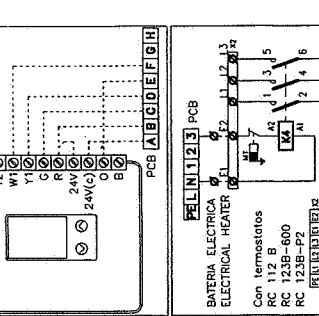
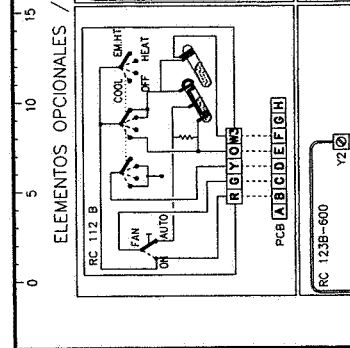
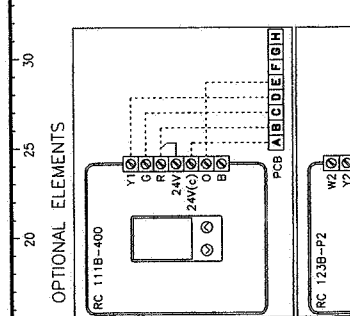
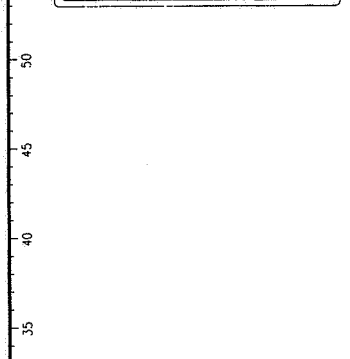
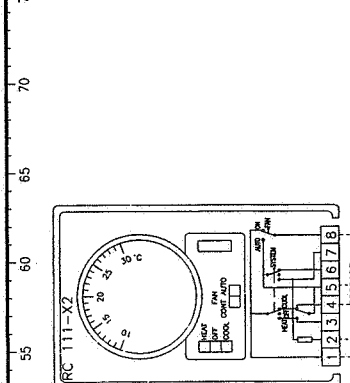
Elemento Opcional  
Optional Element  
A Realizar por el Instalador  
To Wire by the Installer



# FLB 7 - 8 - 10



- 75 CFM Motor Ventilador Exterior
- 75 CH Calefador de Carter
- 75 CM Motor del Compresor
- 75 EV Batería Eléctrica
- 75 F Protección Térmica
- 75 F4-7 Magnetotérmico
- 75 FM Motor Ventilador Interior
- 75 FSC Control condensación
- 75 HP Presostato de Alto
- 75 K Contactor
- 75 LP Presostato de Bajo
- 75 MT Termostato de Seguridad
- 75 PCB Placa Circuito Impreso
- 75 PT Transductor de presión
- 75 RC Control Remoto
- 75 RF Relé control condensación
- 75 RV Válvula Inversora
- 75 TD Temporizador de Descarche
- 75 TR Temporizador Anticiclo
- 95 Condenser Fan Motor
- 95 Crank Case Heater
- 95 Compressor Motor
- 95 Electric Heater
- 95 Thermal Protection
- 95 Circuitbreaker
- 95 Internal Fan Motor
- 95 Fan Speed Control
- 95 High Pressure Pressostat
- 95 Contactor
- 95 Low Pressure Pressostat
- 95 Security Thermostat
- 95 Printed Circuit Board
- 95 Pressure Transducer
- 95 Remote Control
- 95 Speed control relay
- 95 Reverse Valve
- 95 Timer Defrost
- 95 Timer Delay



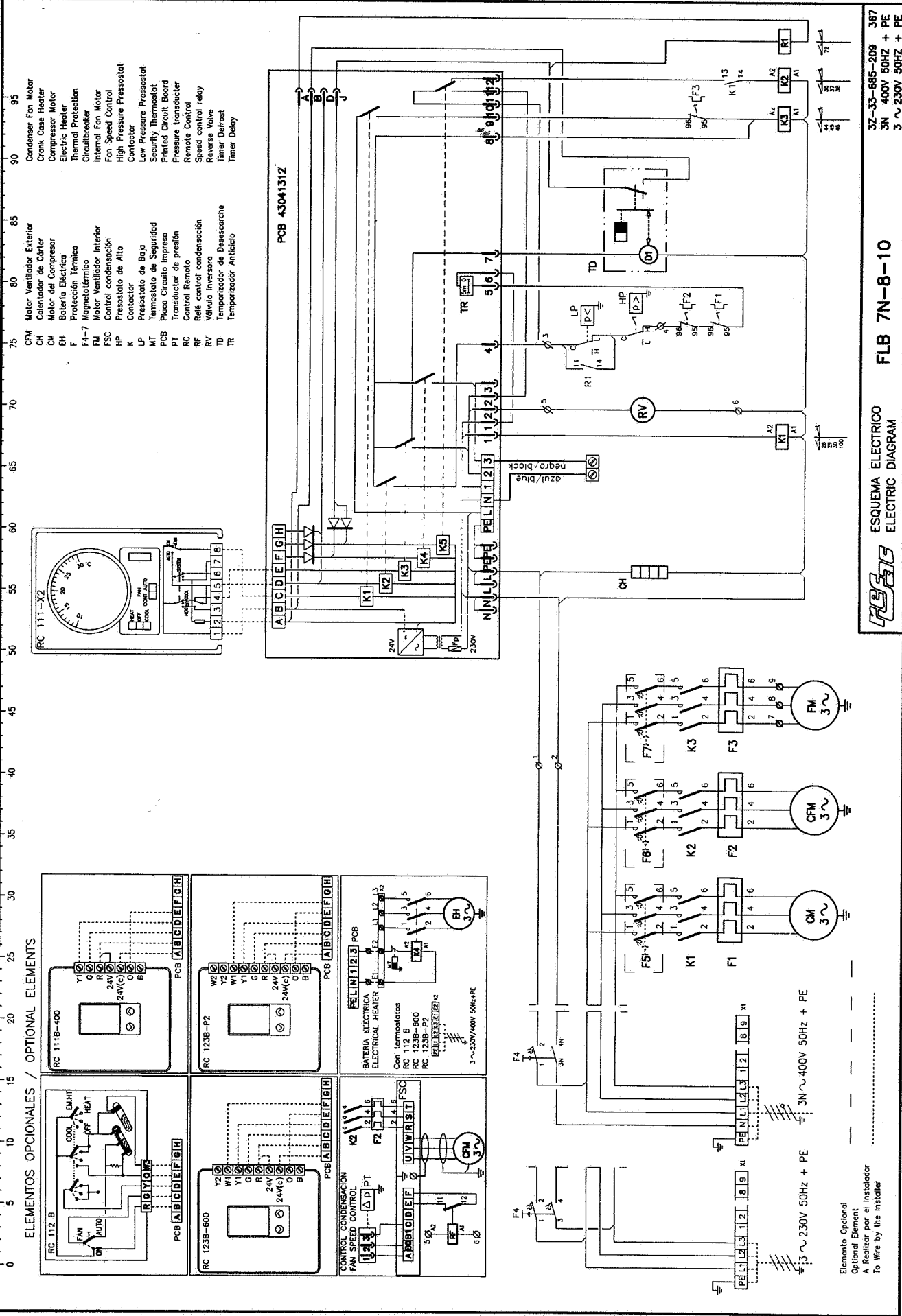
ESQUEMA ELECTRICO  
ELECTRIC DIAGRAM

FLB 7-8-10

3Z-33-685-01B 367  
3N 400V 50HZ + PE  
3 ~ 230V 50HZ + PE

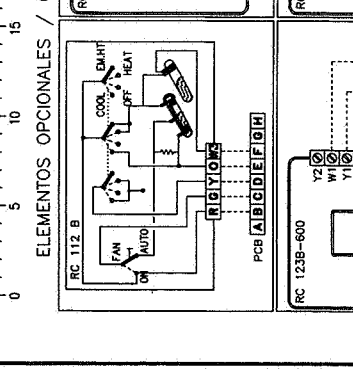
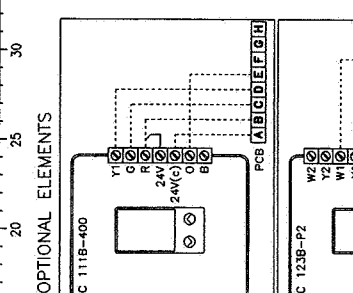
Elemento Opcional  
Optional Element  
A Realizar por el Instalador  
To Wire by the Installer

# FLB 7N - 8 - 10



- |    |                          |
|----|--------------------------|
| 95 | Condenser Fan Motor      |
| 94 | Crank Case Heater        |
| 93 | Compressor Motor         |
| 92 | Electric Heater          |
| 91 | Thermal Protection       |
| 90 | Circuitbreaker           |
| 89 | Internal Fan Motor       |
| 88 | Fan Speed Control        |
| 87 | High Pressure Pressostat |
| 86 | Contactora               |
| 85 | Low Pressure Pressostat  |
| 84 | Security Thermostat      |
| 83 | Printed Circuit Board    |
| 82 | Pressure Transducer      |
| 81 | Remote Control           |
| 80 | Speed control relay      |
| 79 | Reversing Valve          |
| 78 | Timer Delay              |
| 77 | Timer Delay              |

- |    |                                |
|----|--------------------------------|
| 85 | Motor Ventilador Exterior      |
| 84 | Calentador de Carter           |
| 83 | Motor del Compresor            |
| 82 | Bateria Eléctrica              |
| 81 | Protección Térmica             |
| 80 | F4-7 Magnotérmico              |
| 79 | Motor Ventilador Interior      |
| 78 | FSC Control condensación       |
| 77 | Presostato de Alto             |
| 76 | Contactora                     |
| 75 | Presostato de Bajo             |
| 74 | Termostato de Seguridad        |
| 73 | PCB Placa Circuito Impreso     |
| 72 | PT Transductor de presión      |
| 71 | RC Control Remoto              |
| 70 | RF Relé control condensación   |
| 69 | RV Válvula Inversora           |
| 68 | TD Temporizador de Desescarche |
| 67 | TR Temporizador Anticiclo      |



ESQUEMA ELECTRICO  
ELECTRIC DIAGRAM

FLB 7N-8-10

32-33-685-209 367  
3N 400V 50HZ + PE  
3 ~ 230V 50HZ + PE

Elemento Opcional  
Optional Element  
A Realizar por el Instalador  
To Wire by the Installer