ENGINEERING
TOMORROW

Instructions

Optyma™ Plus and INVERTER

Field Pressure change from AKS 32R to DST P110

118U3721 - spare part, AKS32 LP pressure sensor (1 to 12 bar)

118U3722 - spare part, AKS32 HP pressure sensor (0 to 32 bar)

118U4021 - spare part, sensor DST P110 HP

118U4025 - spare part, sensor DST P110 LP

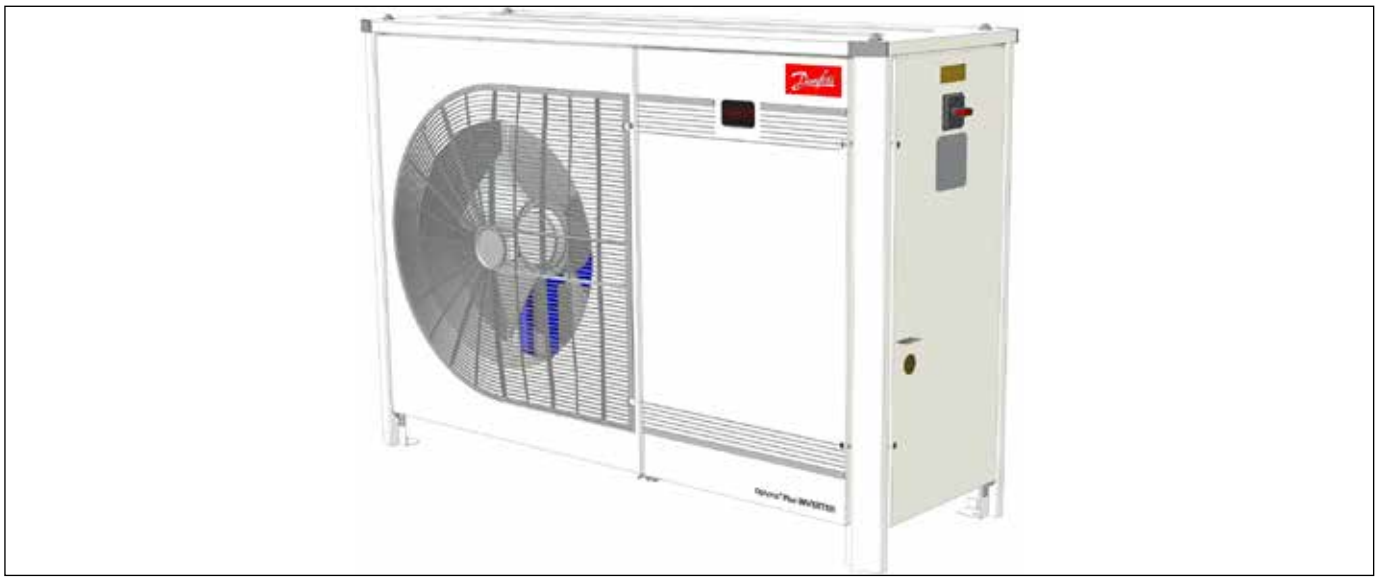
Components & Tools Required:

• Personal safety equipment (Hand gloves and safety glasses)

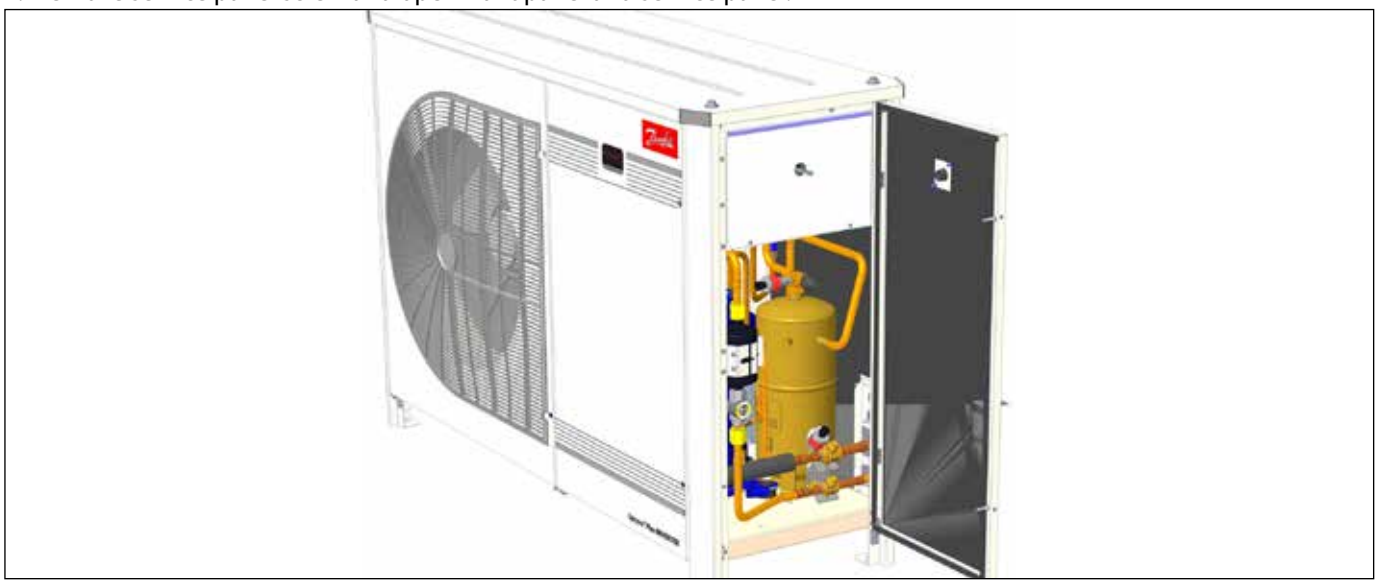
Procedure:

⚠ Work should be done by electric professionals only !

1. Disconnect power supply and ensure fan motor stop before removing side and front panel. Turn of isolator switch before servicing (Rotate Anticlockwise).



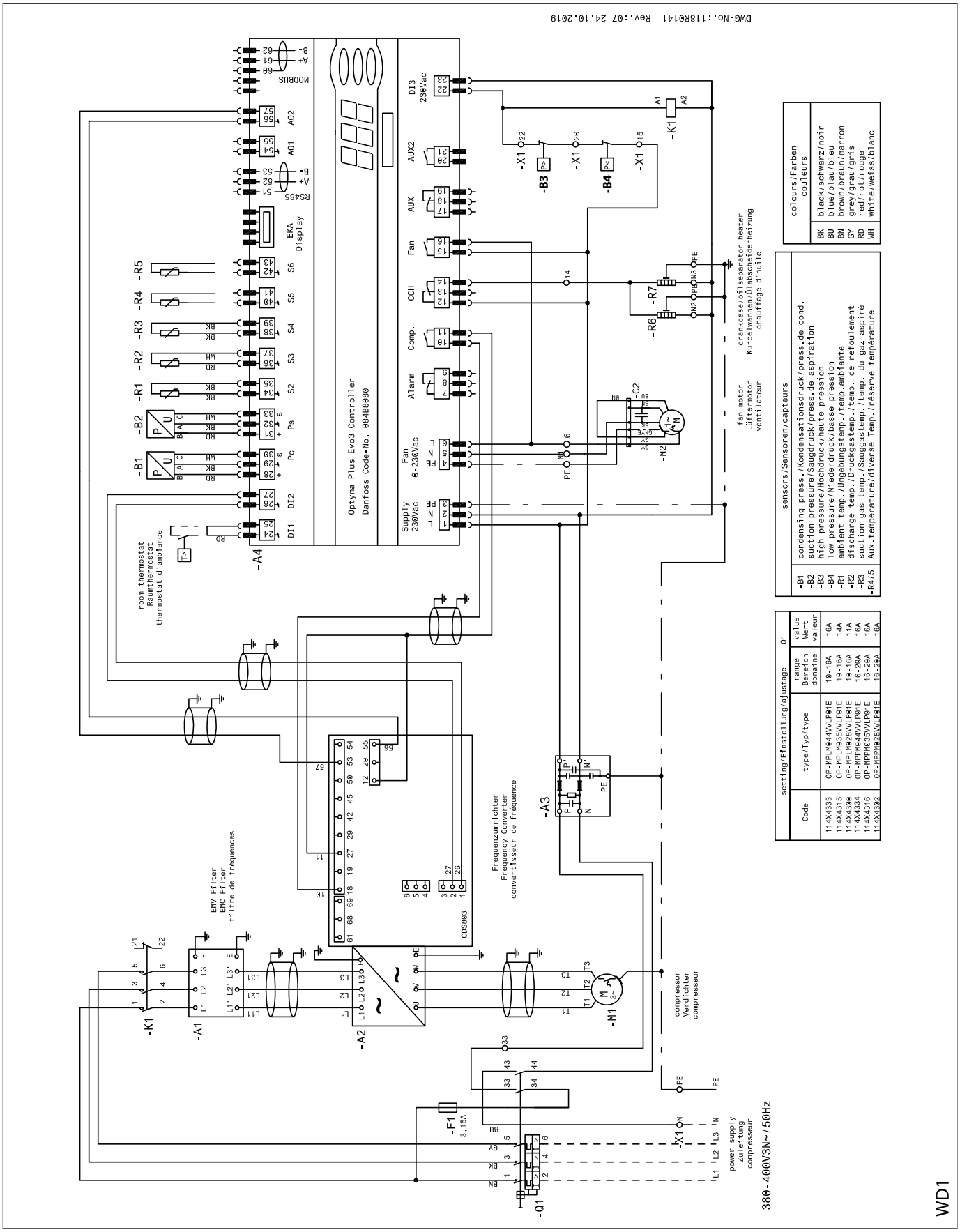
2. Remove service panel screw and open front panel and service panel.



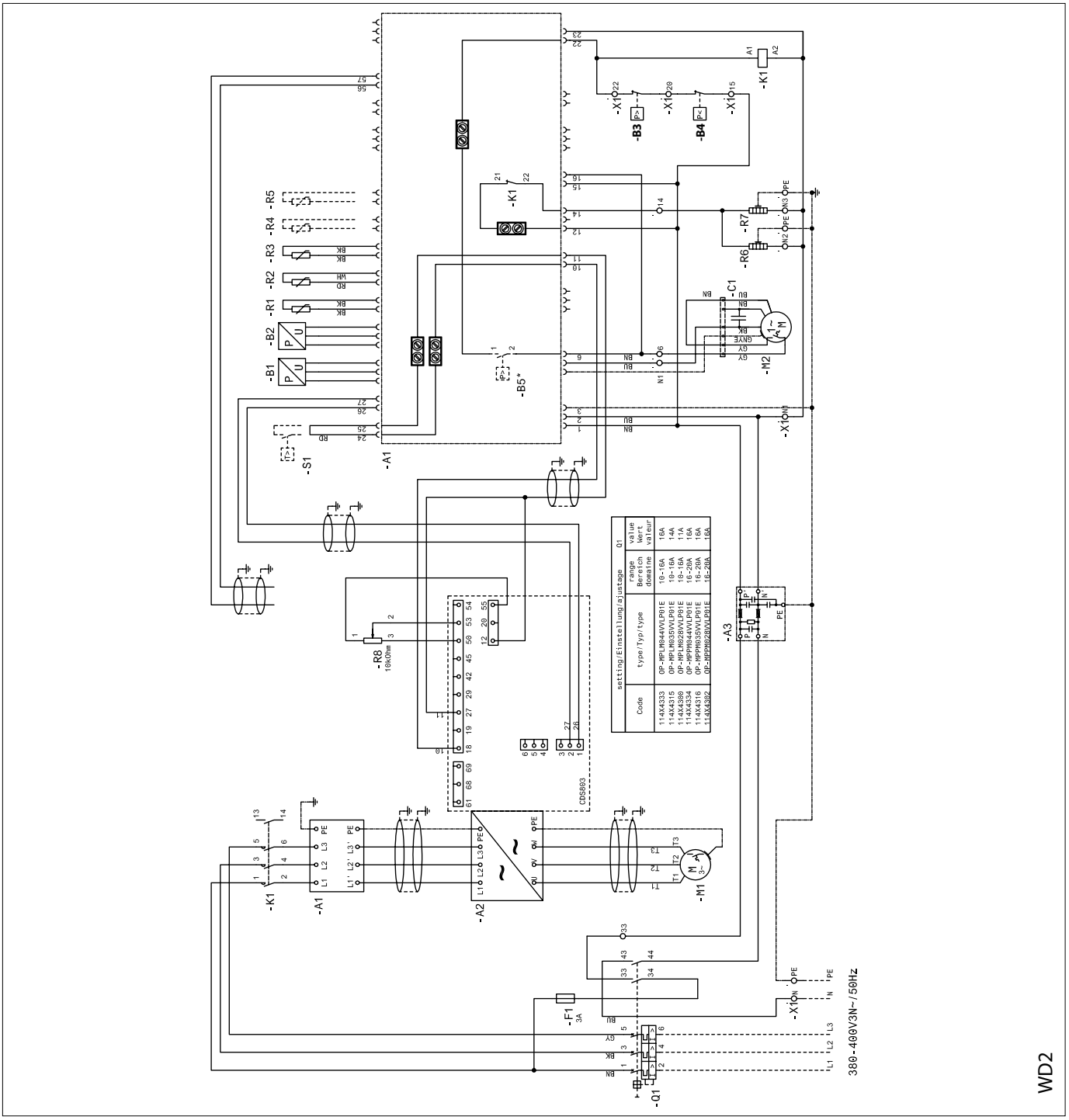
3. Rotate Rotalock (receiver) valve spindel towards clockwise direction to close the valve. Pump down / remove Refrigerant from the system before servicing pressure sensor. (Keep liquid and suction line open.)
4. Remove the tie cable and wire from electrical box. Hold the connection pipe (Schrader valve) and rotate sensor anti-clockwise to remove. Don't damage connection pipe and thread.
5. Now assembly new spare in condensing unit. (Torque 15Nm)
   - 075G1036(118U4021) - In Compressor discharge line.
   - 075G1013(118U4025) - in Condensing unit Suction line.
6. After assembling pressure sensor, connect the cable from P110 sensor to Optyma controller as shown wiring diagram. Use give cables comes with spare part (See Annex -A for Wiring drawing).
7. Complete the electrical connection and ensure there is no leak observed and proper electrical connection.
8. Vaccum entire units, Danfoss recommend to fill fresh refrigerants and close the service and front panel.

Annex -A: Wiring diagram

OP-MPLM028-035-044, OP-MPPM028-035-044



OP-MPLM028-035-044, OP-MPPM028-035-044 - Emergency wiring diagram



A1 : RFI Filter (Compressor)
A2 : Frequency Converter
A3 : RFI Filter (Controls)
A4 : Optyma™ Plus Controller
B1 : Condensing Pressure Transducer
B2 : Suction Pressure Transducer
B3 : High Pressure Switch
B4 : Low Pressure Switch
B5* : Fan Speed Controller / Pressure Switch
C1 : Run Capacitor (Fan)
F1 : Fuse (Control Circuit)
K1 : Contactor
M1 : Compressor
M2 : Fan Motor
Q1 : Main Switch
R1 : Ambient Temp. Sensor
R2 : Discharge Temp. Sensor
R3 : Suction Temp. Sensor
R4,R5 : Auxiliary Temp. Sensor (optional)
R6 : Crankcase Heater
R7 : Oil Separator Heater
R8 : Compressor Speed Potentiometer
S1 : Room Thermostat (optional)
X1 : Terminal
Supply : Supply
Fan : Fan
Alarm : Alarm
Comp. : Compressor
CCH : Crankcase Heater
Aux : Auxiliary

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