

# wexten® WEXTEN PRECISE INDUSTRIES CO., LTD.

## SPECIFICATION



BUYER: \_\_\_\_\_

CONTACT PERSON: \_\_\_\_\_

WORKING MACHINERY: \_\_\_\_\_

PRODUCT: OIL COOLER FOR MACHINE TOOLS

MODEL NO: C018PS-3227D

FINISHED DATE	DRAFTSMAN	DESIGNER	VERIFY
20151014	李永賢	許森永	洪建 10/16

### HISTORY OF MODIFICATION AND CHANGES

NO.	REASONS	DATE	REVISER	VERIFY

#### JUDGE ( TECHNICAL INFORMATION )

1. NON STANDARD

2. STANDARD



## 1. WARRANTY

WARRANTY PERIOD : Since the delivery date within one year ( Exclusion natural disaster and unsuitable operation as the operation is not persuant to manual or without clean.)

DOMESTIC : Absolute replacement or repair.

OVERSEAS : Absolute repair the country that you order.

## 2. SPECIFICATION

(1) The Accessory and drawing list.

(2) Coating.

(3) Power source           Main circuit     : 3  $\phi$  ,AC220V,50/60Hz  
                                  Operation Circuit : 1  $\phi$  ,AC24V,50/60Hz

(4) Electric wiring       According to Client's wiring standard

(5) Operation Condition   Place         : Inside of the room or factory  
                                  Ambient temp : Constant temp (Ventilation)  
                                  Ambient status : Don't use in the ill place with dust, wet, oil gas.

(6) Specific Specification   Have

ITEM	Standard color
PAINTING NO.	RAL-7035

## 3. SPECIFIC ITEM

(1) Please forward the accessories of the cooler to the client and prevent the Vibration during transportaion.



(2) Specific package for abroad transportation.

(3) Please check the setting value for running power source ON/OFF and SW1~SW4 before delivery.



(4) Please note that the oil level would let the pump make the noise and break easily, thus, please put more attention for oil quantity.



## ACCESSORY AND DRAWING LIST

NO.	ITEM	QUANTITY	DRAWING NO.	NOTES
	Accessory			
1	C018PS	1		
2	Standard Accessory			
	• Operation Manual	1		(Attached in the Machinery)
	• Dangerous sticker	5		(Sticker on the plate)
	Drawing list			
1	Specification		C018PS-M051	
2	Dimension diagram		C018PS-M061	
3	Cooling system diagram		C018PS-M071	
4	Electrical circuit diagram		C018PS-M081	
5	Electrical parts list		C018PS-M091	
6	Operation limits		C018PS-M101	

## REVISE DRAWING DESCRIPTION

PAGINATION	DATE	REVISER	CONTENT	DRAWING
				 



機種	MODEL	C018PS
冷卻能力 COOLING CAPACITY	(60 Hz) (60 Hz)	18000BTU/Hr 4500KCAL/Hr
電源 POWER SOURCE	主迴路 MAIN CIRCUIT 操作迴路 OPERATION CIRCUIT	3ø 220v 50/60 Hz 1ø 24V 50/60 Hz
外塗裝編號 EXTERNAL PAINTING NUMBER		RAL-7035
外型尺寸 EXTERNAL DIMENSION	(長*寬*高) mm (DxWxH) mm	674x544x1201
壓縮機 COMPRESSOR		18000BTU/Hr
蒸發器 EVAPORATOR		板式熱交換器 PLATE TYPE HEAT EXCHANGER
冷凝器 CONDENSER		鱗片式 CROSS-FIN COIL TYPE
風扇葉片 FAN BLADE		14" PROPELLER FAN
油幫浦 OIL PUMP	吐出量 (60Hz) DISCHARGE CAPACITY	30 L/min
油溫度調節 OIL TEMPERATURE CONTROL		差溫式 (比對溫、調節範圍-9.9°C~+9.9°C) WITH ROOM TEMPERATURE (ADJUSTABLE DIFFERENTIAL TEMPERATURE RANGE:-9.9°C~+9.9°C)
冷媒控制 REFRIGERANT CONTROL		毛细管 CAPILLARY TUBE

保護裝置 PROTECTION DEVICES	過電流保護器 (壓縮機用、電動機用) 、逆欠相保護裝置、再起動防止、高油溫保護 、低油溫保護、油壓力開關、冷媒高壓開關、防凍基板 OVERCURRENT RELAY FOR COMPRESSOR AND PUMP MOTOR PHASE-REVERSAL & RELAY DELAY TIMER HIGH OIL TEMPERATURE SENSOR LOW OIL TEMPERATURE SENSOR OIL PRESSURE METER REFRIGERANT PRESSURE METER ANTIFREEZE PC BOARD	
冷媒 REFRIGERANT	R407C	
使用可能油 APPLICABLE OILS	潤滑油, 油壓作動油 LUBRICANT , PRESSURE OIL	
使用範圍 OPERATIVE RANGE	室溫 ROOM TEMP	5°C~45°C
	入口油溫 OIL INLET TEMP	5°C~45°C
	油 品 OIL SPEC.	ISO VG32
接繞配管 CONNECTION PIPING SIZE	油 入 口 OIL INLET	PT 1"
	油 出 口 OIL OUTLET	PT 1"
	補 給 口 SUPPLY OUTLET	
	排 液 口 OIL DRAIN	
製品質量 COOLER WEIGHT		133kg
標準附屬品 STANDARD ACCESSORY		說明書 OPERATING MANUAL



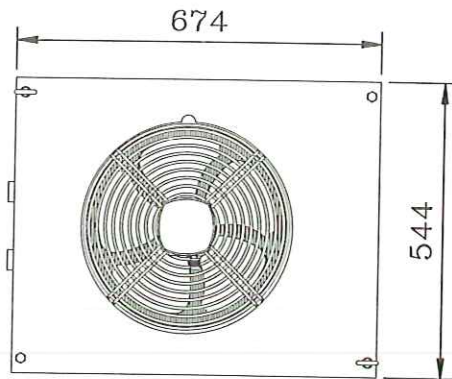
\* 條件 室溫:35°C 油入口溫度:35°C  
AC 3ø220V 50/60HZ

\* Test term  
ROOM TEMPERATURE:35°C OIL INLET TEMPERATURE:35°C  
AC 3ø220V 50/60HZ

威士頓精密工業有限公司 WEXTEN PRECISE INDUSTRIES CO.,LTD.	型式 MODEL	C018PS	圖號 NO.	C018PS-M051	設計 DESIGN	許森永	製圖 DRAFTSMAN	李家賢	審核 VERIFY	沈瑞 1/6
	型號 TYPE	OIL COOLER SERIES SPECIFIC FOR MACHINE TOOLS	名稱 NAME	SPECIFICATION	單位 UNIT	mm	客戶 CLIENT	STANDARD	比例 SCALE	1:1
									日期 DATE	151015

Coated Color RAL-7035

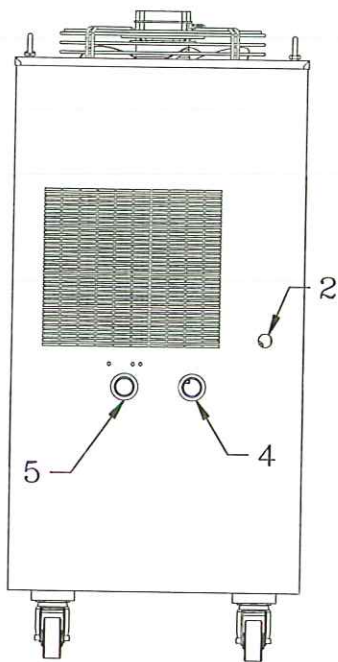
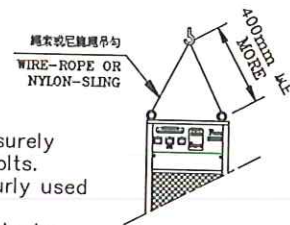
NO.	NAME	SPECIFICATION
1	Control Panel	-9.9°C~+9.9°C(±1.5°C)
2	Power Intake Hole	∅22, 3∅220V, 50/60HZ
3	Air Filter	540x513mm
4	Oil Inlet	PT 1"
5	Oil Outlet	PT 1"



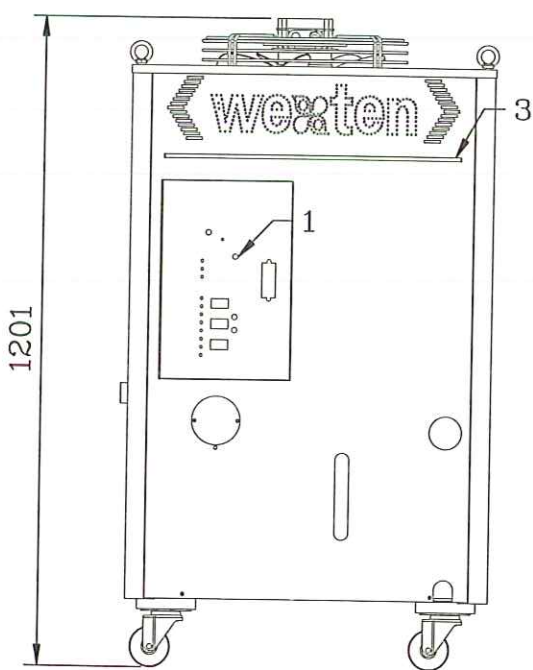
TOP VIEW

- 注1. 吸氣、排氣孔 500mm內，勿放置障礙物。  
 2. 懸吊物品時，一定要勾住2個金屬吊環。  
 3. 油配管出入口一定要使用大於20A SGP之管子。  
 4. 排液口之油管需確定安裝在固定位置上。

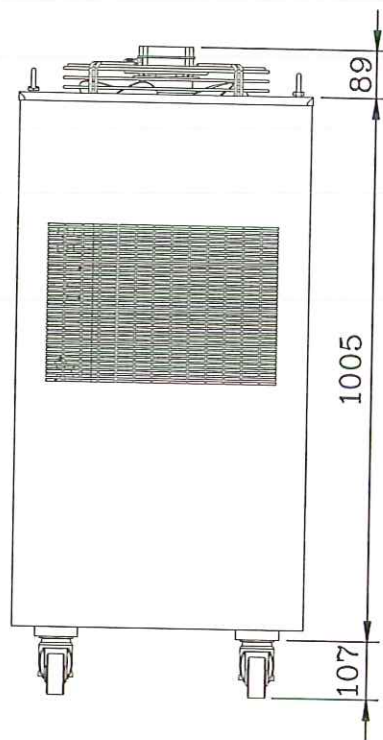
- NOTES) 1. Don't place any obstacles within 500mm from suction and exhaust side.  
 2. When hanging the unit up, to be surely hanging the unit using 2 eye bolts.  
 3. Both oil inlet and outlet pipe is surely used more than 20A SGP pipe.  
 4. The pipe for oil drain pan is sure to be installed on site.



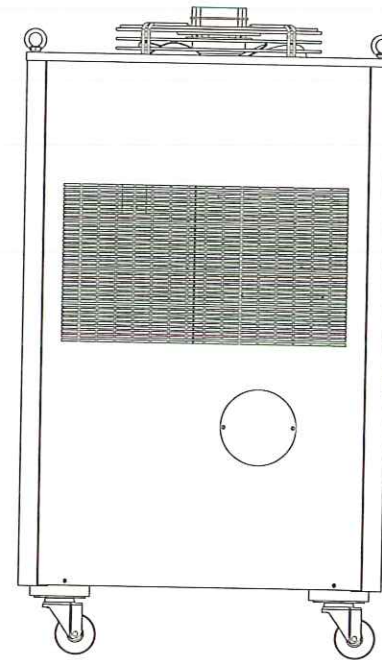
LEFT VIEW



FRONT VIEW



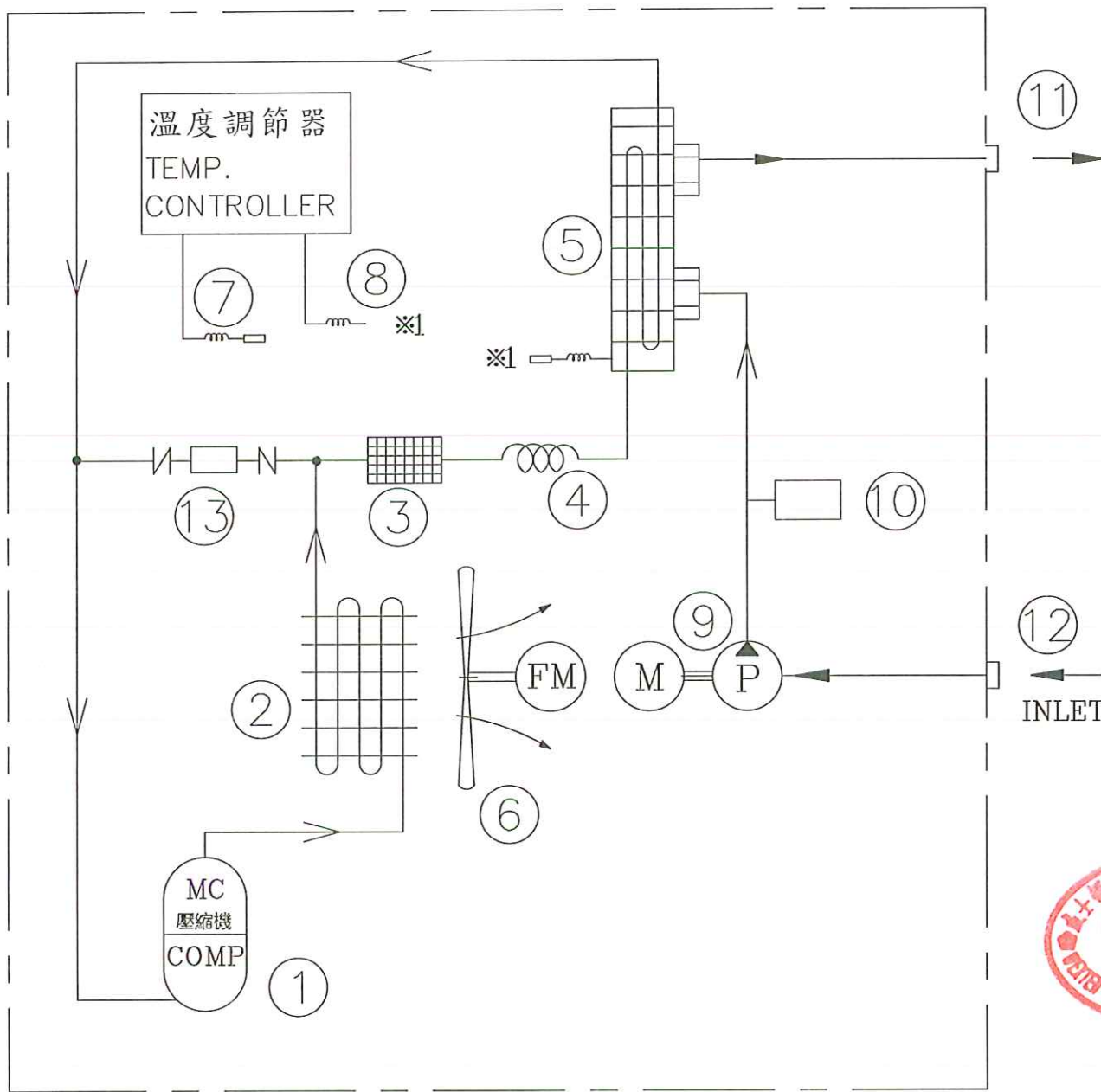
RIGHT VIEW



REAR VIEW

威士頓精密工業有限公司	型式 MODEL	C018PS	圖號 NO.	C018PS-M062	設計 DESIGN	許森永	製圖 DRAFTSMAN	李家賢	審核 VERIFY	洪斌 10/16
WEXTEN PRECISE INDUSTRIES CO.,LTD.	型號 TYPE	OIL COOLER SERIES SPECIFIC FOR MACHINE TOOLS	名稱 NAME	DIMENSION	單位 UNIT	mm	客戶 CLIENT	STANDARD	比例 SCALE	1:14
									日期 DATE	151015





NO	名稱	NAME
1	壓縮機	Compressor
2	冷凝器	Condenser
3	乾燥器	Dryer
4	毛細管	Capillary Tube
5	蒸發器	Evaporator
6	風扇馬達	Fan Motor
7	室溫感溫棒	Room temperature sensor
8	油溫感溫棒	Oil temperature sensor
9	幫浦馬達	Pump Motor
10	油壓力開關	Oil Pressure meter
11	油出口	Oil Outlet PT 1"
12	油進口	Oil Inlet PT 1"
13	冷媒高低壓開關	Refrigerant pressure switch



威士頓精密工業有限公司

WEXTEN PRECISE INDUSTRIES CO.,LTD.

型式  
MODEL  
型號  
TYPE

C018PS  
OIL COOLER SERIES  
SPECIFIC FOR MACHINE TOOLS

圖號  
NO.  
名稱  
NAME

C018PS-M071  
COOLING SYSTEM

設計  
DESIGN

許森永

製圖  
DRAFTSMAN

李家賢

審核  
VERIFY

日期  
DATE

151015

單位  
UNIT

mm

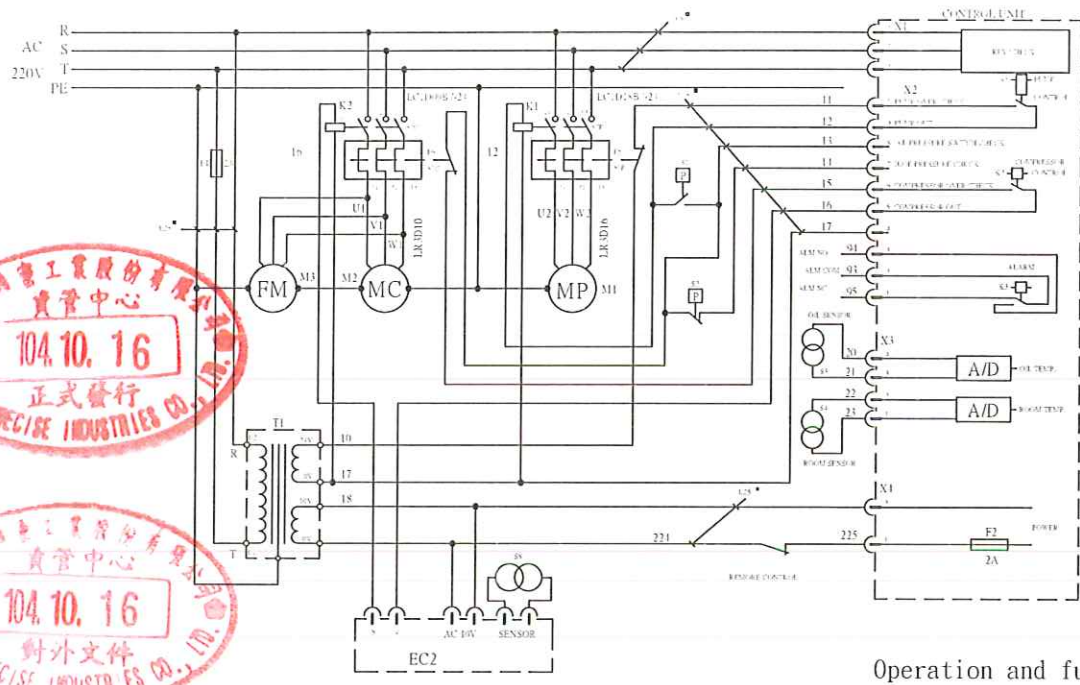
客戶  
CLIENT

STANDARD

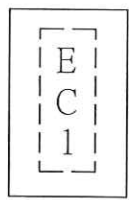
比例  
SCALE

1:1

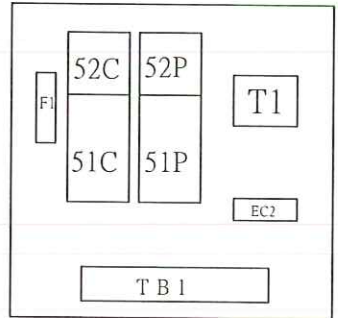
日期  
DATE



CONTROL PANEL

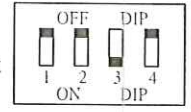


SWITCH BOX



<VERTICAL/HORIZONTAL BIG CONTROL PANEL SETTING FUNCTION>

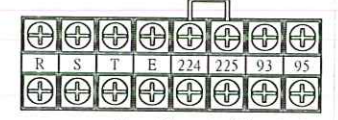
S4 DIP SW FUNCTION:  
 1: OFF-MANUAL CONTROLLED  
 2: OFF-DIFFERENTIAL ACTION MODE  
 3: ON-DETECTION REV  
 4: OFF-NORMAL ACTION MODE



S4 DIP SW - 4 : ON  
 FUNCTION SETTING: USING THE KEY ON/OFF TO CHOOSE THE SETTING ITEM FROM 01-14 AND USE THE KEY TO ADJUST Δ▽ THE SETTING VALUE)

- 01 : 50°C
- 02 : 5°C
- 03 : 40°C
- 04 : 5°C
- 05 : +9.9°C
- 06 : -9.9°C
- 07 : +1.5°C
- 08 : -1.5°C
- 09 : 30 sec
- 10 : YES
- 11 : NO
- 12 : NO
- 13 : Rectifying the Liquid Temp
- 14 : Rectifying the Room Temp

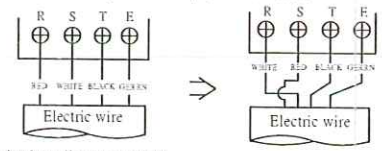
Diagram of power connection, alarm connection and remote control:



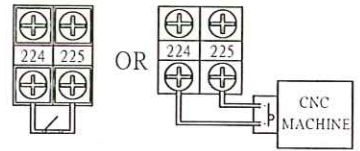
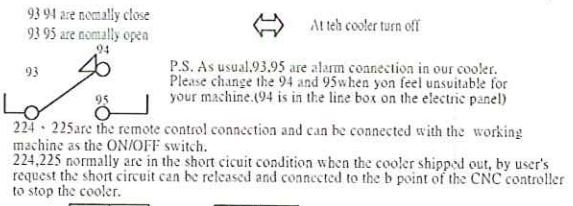
Operation and function of control panel

NO	ITEM	OUTLINE	OPERATION&FUNCTION
1	Set keys	ON/OFF SWITCH	Run/Stop Switch, touch type
		SET TEMPERATURE	◀ Low temp. setting key, touch type ▶ High temp. setting key, touch type
3	Working keys	POWER-green lamp	Power Source lamp Show the cooler is with electricity
		PUMP-green lamp	Pump is running normally
		COOL-green lamp	Compressor is running normally
6	Alarm signs	REV-Red lamp	Three phase power unusual
		OPS-Red lamp	Oil pressure circuit unusual
		PUMP-Red lamp	Pump motor unusual
		COMP-Red lamp	Compressor is running unusual
10	Alarm signs	HP-Red lamp	Refrigerant's pressure unusual
		RA -Red lamp	The room temp. Sensor is not working.
		RO-Red lamp	The oil temp. Sensor is not working.
		OT-Red lamp	Oil temp. is too high

⊙ R.S.T are the power source connections of the cooler. When the phase sequence is in correct, the alarm lamp will be shown on the small control panel and the monitor will display RE. And big control panel will display REV ALARM.



⊙ E is the earth wire (yellow-green color)  
 ⊙ Under no power supply condition.  
 ⊙ 93, 95, are the b point of the signal, (see as follow)  
 Both of this alarm connections is on-line with CNC machine to detect the cooler status, directly.



POEWR SOURCE CAPACITY	RATED VOLTAGE		OVERCURRENT RELAY (A)	
	220V	3.0 KW	51C	51P
CO18PS			CO18PS	9.0A 4.0A
51C	OVERCURRENT RELAY	F1	TRANSFORMER FUSE	
51P	OVERCURRENT RELAY	F2	BOARD FUSE	
52C	CONTACTOR	MC	MOTOR (COMP)	
52P	CONTACTOR	MP	MOTOR (PUMP)	
LED1	PILOT LAMP (POWER-GREEN)	SW1	(AUTO-MANUAL) SWITCH	
LED2	PILOT LAMP (PUMP-GREEN)	SW2	SETTING SELECTOR SWITCH	
LED3	PILOT LAMP (COOL-GREEN)	SW3	REV SELECTOR SWITCH	
LED4	PILOT LAMP (REV-RED)	SW4	FUNCTION SETTING	
LED5	PILOT LAMP (OPS-RED)	S1	OIL PRESSURE SWITCH	
LED6	PILOT LAMP (PUMP-RED)	S2	REFRIGERANT PRESSURE SWITCH	
LED7	PILOT LAMP (COM-RED)	S3	OIL TEMPERATURE SENSOR	
LED8	PILOT LAMP (HP-RED)	S4	ROOM TEMPERATURE SENSOR	
LED9	PILOT LAMP (RA-RED)	S8	ANTI-FROST THERMISTOR	
LED10	PILOT LAMP (RO-RED)	T1	TRANSFORMER	
LED11	PILOT LAMP (OT-RED)	TB	TERMINAL BLOCK	
EC1	CONTROL CIRCUIT BOARD	FM	FAN MOTOR	
EC2	ANTIFREEZE PC BOARD			

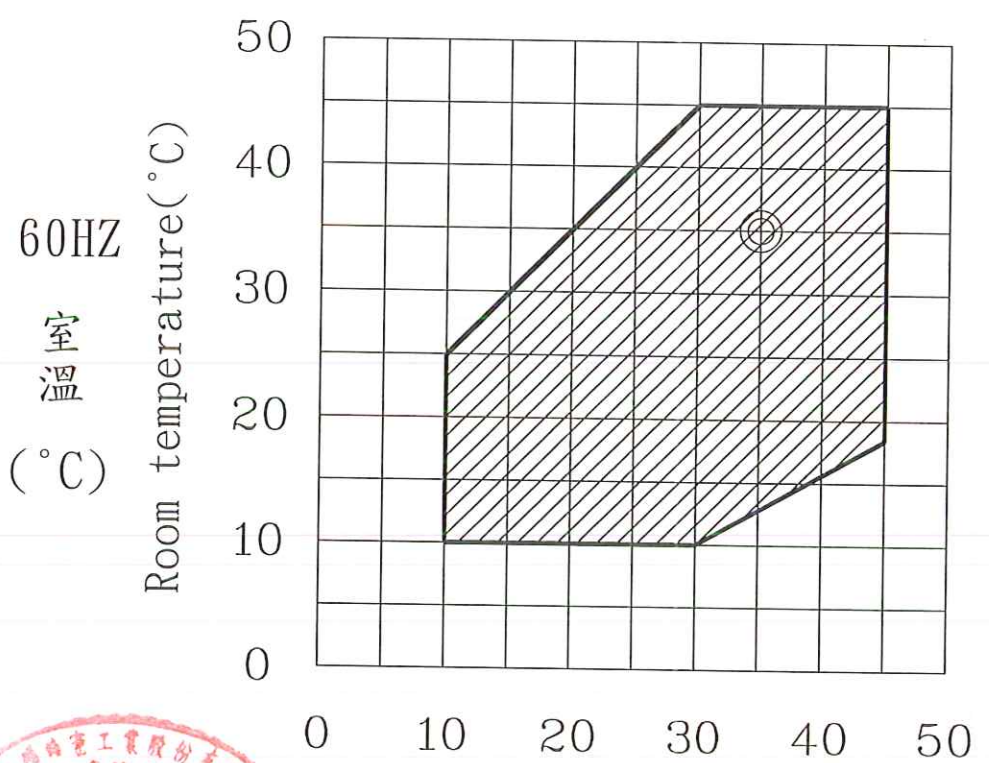
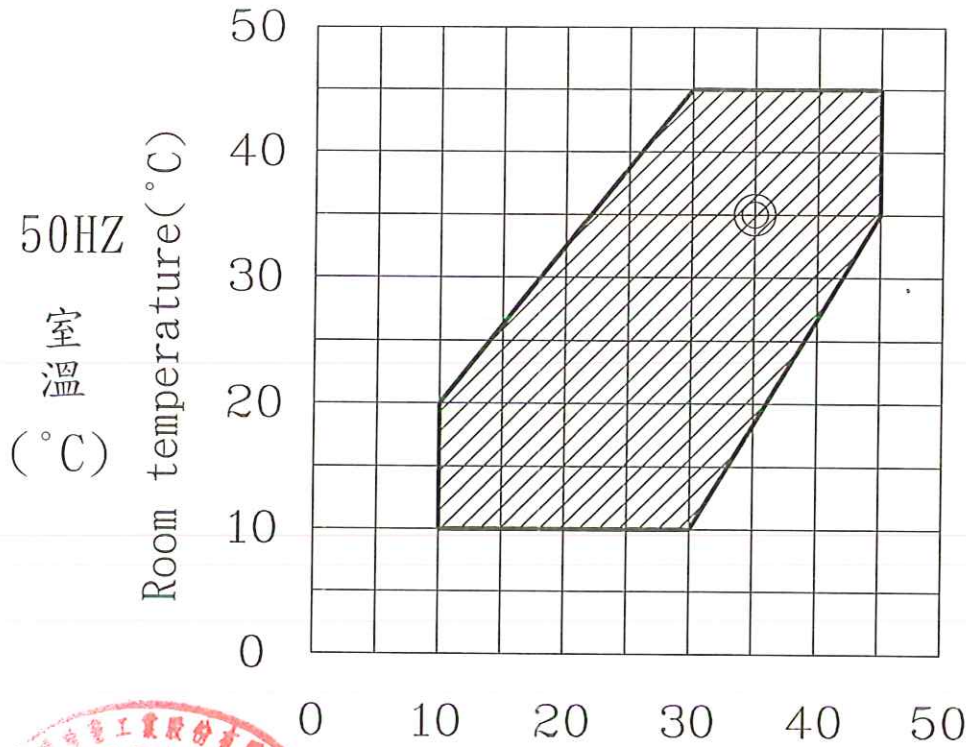


NO	零件名稱 PARTS NAME	符號 MARKS	形號 TYPE
1	壓縮機 COMPRESSOR	MC	18000BTU/Hr
2	幫浦馬達 PUMP MOTOR	MP	30 L/min
3	控制基板 CONTROL CIRCUIT BOARD	EC1	P-3HV
4	油溫感溫棒 OIL TEMPERATURE SENSOR	S3	NTC-1001C
5	室溫感溫棒 ROOM TEMPERATURE SENSOR	S4	NTC-1001C
6	接觸器 CONTACTOR	52C	LC1D18B7
7	接觸器 CONTACTOR	52P	LC1D09B7
8	過電流保護器 OVERCURRENT RELAY	51C	LR3D16
9	過電流保護器 OVERCURRENT RELAY	51P	LR3D10
10	端子台 TERMINAL BLOCK	TB1	20A8P

NO	零件名稱 PARTS NAME	符號 MARKS	形號 TYPE
11	防凍感溫棒 ANTI-FROST THERMISTOR	S8	NTC-1001C
12	保險絲 FUSE	F1 F2	30MM 2A 20MM 3A
13	變壓器 TRANSFORMER	T1	220V/26V/12V
14	接地銅板 GROUND COPPER PLATE	⊕	5P
15	油壓力開關 OIL PRESSURE SWITCH	S1	P2E
16	冷媒壓力開關 REFRIGERANT PRESSURE SWITCH	S2	P830
17	散熱風扇 COOLING FAN	FM	14"
18	防凍基板 ANTIFREEZE PC BOARD	EC2	ICE



威士頓精密工業有限公司 WEXTEN PRECISE INDUSTRIES CO.,LTD.	型式 MODEL	C018PS	圖號 NO.	C018PS-M091	設計 DESIGN	許森永	製圖 DRAFTSMAN	李家賢	審核 VERIFY	汝斌	
	型號 TYPE	OIL COOLER SERIES SPECIFIC FOR MACHINE TOOLS	名稱 NAME	ELECTRIC PARTS LIST	單位 UNIT	mm	客戶 CLIENT	STANDARD	比例 SCALE	1:1	日期 DATE



工作機械入口液體溫度(°C)  
Inlet liquid temperature(°C)



工作機械入口液體溫度(°C)  
Inlet liquid temperature(°C)

備註: 1. ◎ :標準點 (Max. cooling performance)  
 ▨ :使用範圍 (Applicable cooling range)

2. 操作時必須於使用範圍內  
 (於使用範圍條件外操作, 會造成故障)

(Please be sure to operate this unit within the applicable cooling range, or it will result in the breakdown.)

威士頓精密工業有限公司 WEXTEN PRECISE INDUSTRIES CO.,LTD.	型式 MODEL C018PS	圖號 NO. C018PS-M101	設計 DESIGN 許森永	製圖 DRAFTSMAN 李家賢	審核 VERIFY 張文輝 1/6
	型號 TYPE OIL COOLER SERIES SPECIFIC FOR MACHINE TOOLS	名稱 NAME OPERATION LIMITS	單位 UNIT mm	客戶 CLIENT STANDARD	比例 SCALE 1:1
				日期 DATE 151015	