

# OMEGA Ducted Fan Coil Inverter Split

## SUBMITTAL DATA

**208~230V/1/60Hz**

Job: \_\_\_\_\_  
 Location: \_\_\_\_\_  
 Schedule No.: \_\_\_\_\_  
 System Designation: \_\_\_\_\_

Engineer: \_\_\_\_\_  
 Architect: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 For:      Reference      Approval      Review      Construction

### FEATURES

#### Outdoor

- Twin Rotary Inverter Compressor
- Compressor Overload Protection
- Super Quiet Operation
- Electronic Expansion Valve
- Copper Tubes with Aluminum Fins
- Wide Operation Temperature Range

#### Indoor

- Cooling and Heating System
- Selection of Low, Medium, and High Static
- Multi-Protection
- Up to 16 SEER in Cooling Mode
- Quiet Centrifugal Blower
- Direct Access for Maintenance



## 1. Specifications

### IELP(MP,HP) - Ducted Fan Coil Indoor Unit

Model			18K	24K	36K	48K	60K
			IELP618K2A-GCG053	IEIMP624K2A-GCG071	IEIMP636K2A-GCG105	IEHP648K2A-GCG140	IEHP660K2A-GCG160
Indoor power supply		V/Ph/Hz	230V /1/60	230V /1/60	230V /1/60	230V /1/60	230V /1/60
Cooling	Capacity (IDU&ODU)	BTU	18000	24000	36000	48000	55000
	Input (IDU&ODU)	W	1600	2450	3750	5550	5900
	Rated current (IDU&ODU)	A	7.1	10.9	16.6	24.6	26.2
	EER (IDU&ODU)	BTU/W	11.3	9.8	9.6	8.6	9.3
Heating	Capacity (IDU&ODU)	BTU	19000	24000	35000	52000	55000
	Input (IDU&ODU)	W	1600	2450	3450	5500	5300
	Rated current (IDU&ODU)	A	7.1	10.9	15.3	24.4	23.5
	COP (IDU&ODU)	W/W	3.5	2.9	3.0	2.8	3.0
Input (IDU)		W	210	265	340	510	510
Rated current(IDU)		A	0.9	1.2	1.6	2.2	2.2
Max. power input (IDU&ODU)		W	1920	2940	4500	6400	6400
Max. current input (IDU&ODU)		A	10.0	16.0	23.0	34.0	34.0
Indoor fan motor	Model		YSK110-90F-4P2H105-1	YSK120-150F-4P2H105	YSK110-180LD-4P2	YSK139-250F-4P3	YSK139-250F-4P3
	Brand		KANGBAO /XINJUN	KANGBAO /XINJUN	XINJUN/Welling /YONGAN	KANGBAO	KANGBAO
	Power output	W	90	150	180	250	250
	Capacitor	μF	5	6	5	12	12
	Speed	r/min	1160/1000/900/870	1300/1150/1080/1030	1360/1290/1200/1100	1120/1000/900/800	1120/1000/900/800
	Insulation class			B	B	B	B
Indoor coil	Number of rows		3	3	3	3	4
	Tube pitch(a) x row pitch(b)	mm	22*19.05	22*19.05	22*19.05	22*19.05	22*19.05
	Fin spacing	mm	1.7	1.7	1.7	1.5	1.5
	Fin type			Hydrophilic	Hydrophilic	Hydrophilic	Hydrophilic
	Tube outside dia. and type	mm		φ7.94	φ7.94	φ7.94	φ7.94
				inner grooved copper	inner grooved copper	inner grooved copper	inner grooved copper
	Coil length x height x width			900*264*57.15	900*264*57.15	1136*264*57.15	1030*396*57.15
Number of circuits			6	6	6	8	8
Standard static pressure		Pa	25	25	37	50	50
Indoor air flow(High speed)		m <sup>3</sup> /h	1370	1560	2200	2500	2500
Pressure range		Pa	0~100	0~100	0~160	0~200	0~200
Indoor noise level		dB(A)	41~52	46~55	47~56	46~53	46~53
Indoor unit	Dimension(W×H×D)	mm	1190×260×643	1190×260×643	1425×260×643	1325*300*830	1325*300*830
	Packing(W×H×D)	mm	1255×325×720	1255×325×720	1490×325×720	1395*380*920	1395*380*920
	Gross/Net weight	kg	36/32	36/32	50/46	55/48	56/49
Max pressure		MPa	4.0	4.0	4.0	4.0	4.0
Refrigerant type			R410A	R410A	R410A	R410A	R410A
Refrigerant piping	Liquid side/Gas side	mm	φ9.52/φ15.88	φ9.52/φ15.88	φ9.52/φ19.05	φ9.52/φ19.05	φ9.52/φ19.05
Drainage pipe		mm	DN25	DN25	DN25	DN25	DN25
Standard controller			<b>24V Thermostat</b>				
Operation temp		°C	16~32	16~32	16~32	16~32	16~32

## 1. Specifications

### ICHE - Outdoor Unit

Model		18K	24K	36K	48K	60K	
		ICHE618K2A-GMG053	ICHE624K2A-GMG071	ICHE636K2A-GMG105	ICHE648K2A-GMG140	ICHE660K2A-GMG160	
Outdoor power supply		V/Ph/Hz	230V /1/60	230V /1/60	230V /1/60	230V /1/60	
Compressor	Model		SNB140FULMC	SNB200FGMMC	ATM240D57UMT	MNB40FEQMC	MNB40FEQMC
	Type		DC/Twin-rotary	DC/Twin-rotary	DC/Twin-rotary	DC/Twin-rotary	DC/Twin-rotary
	Brand		Mitsubishi	Mitsubishi	GMCC	Mitsubishi	Mitsubishi
	Frequency range	rps	10-130	10-120	10-120	10-120	10-120
	Capacity	W	4360	6175	7235	12900	12900
	Input	W	1300	1960	1945	3960	3960
	Rated Current (RLA)	A	4.4	6.7	8.5	14.8	14.8
	Refrigerant oil	ml	350	400	670	1100	1100
Outdoor fan motor	Model		YDK-75-6P2	YDK-75-6P2	YDK-105-6P2-1	YDK-230-6P2-2	YDK-230-6P2-2
	Brand		lvzhi	lvzhi	SINJUN	KB	KB
	Power output	W	75	75	105	230	230
	Power input	W	152	152	197	370	370
	Speed	r/min	890/620	890/620	880/680	880/600	880/600
	Insulation class		B	B	B	B	B
Outdoor coil	Number of rows		2	3	3	2	3
	Tube pitch(a)×rowpitch(b)	mm	21*13.37	21*13.37	21*13.37	21*19.4	21*19.4
	Fin spacing	mm	1.5	1.4	1.5	1.55	1.55
	Fin type		Hydrophilic	Hydrophilic	Hydrophilic	Hydrophilic	Hydrophilic
	Tube outside dia. and type	mm	7	7	7	7	7
			inner grooved copper	inner grooved copper	inner grooved copper	inner grooved copper	inner grooved copper
	Coil length×width×height	mm	790*651*26.74	784*651*40.11	1000*756*40.11	1145*798*38.8	1145*798*58.2
	Number of circuits		4	7	6	11	11
Outdoor air flow(High speed)		m <sup>3</sup> /h	3300	3300	4200	5500	6000
Outdoor noise level(High speed)		dB(A)	54	54	56	57	57
Outdoor unit	Dimension(W×D×H)	mm	935*383*702	935*383*702	1032*445*810	1100*528*870	1100*528*870
	Packing(W×D×H)	mm	975*495*875	975*495*875	1075*495*875	1140*540*965	1140*540*965
	Gross/Net weight	kg	45.5/42	49/45.5	65/60	85/75	90/80
Refrigerant type/quantity		g	1800	2000	3000	3300	3600
Throttle part			Cooling: EXV Heating:EXV	Cooling: EXV Heating:EXV	Cooling: EXV Heating:EXV+ PISTON	Cooling: EXV Heating:EXV+ PISTON	Cooling: EXV Heating:EXV+ PISTON
Design pressure		MPa	4.0	4.0	4.0	4.0	4.0
Max. pressure		MPa	4.5	4.5	4.5	4.5	4.5
Refrigerant piping	Liquid side/Gas side	mm	φ9.52/φ15.88	φ9.52/φ15.88	φ9.52/φ19.05	φ9.52/φ19.05	φ9.52/φ19.05
	Max. pipe length	m	30	30	30	30	30
	Max. high drop	m	10	10	10	10	10
Ambient temp (ODU)	Cooling	°C	16~46	16~46	16~46	16~46	16~46
	Heating	°C	-7~30	-7~30	-7~30	-7~30	-7~30

**2. Dimensional Drawings**

**IELP(MP,HP) - Ducted Fan Coil Indoor Unit**

Unit:mm

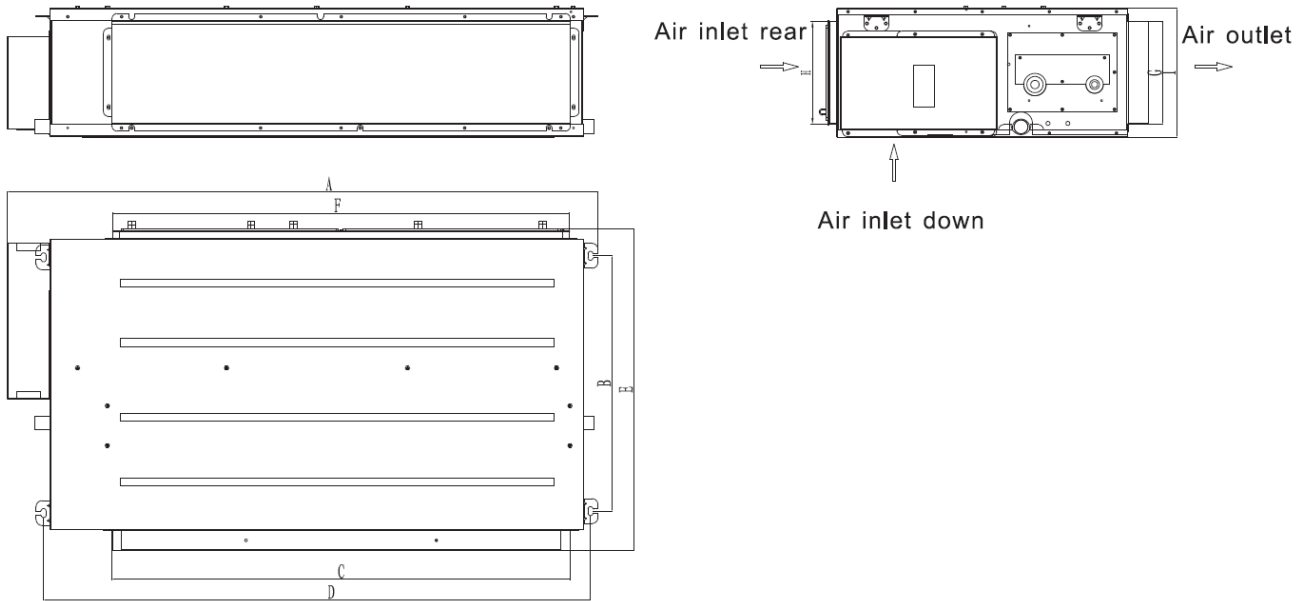


Table 1: unit : mm

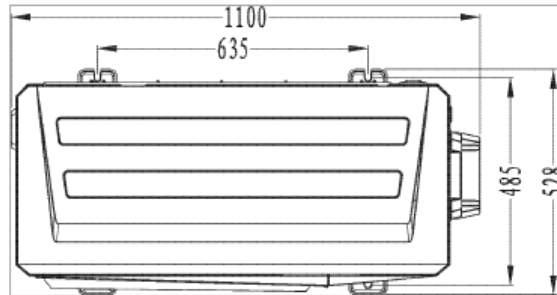
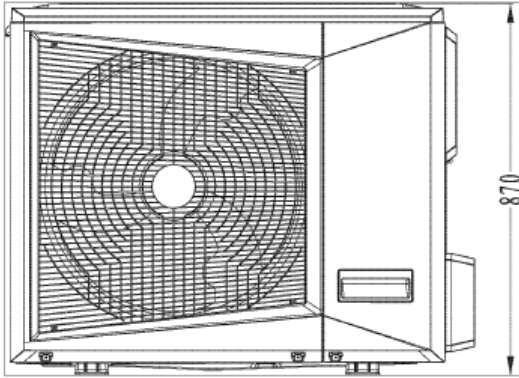
Items Model(Btu/h)	A	B	C	D	E	F	G	H	I
18/24K	1190	515	920	1100	643	920	207	207	260
36K	1425	515	1155	1337	643	1155	207	207	260

**2. Dimensional Drawings**

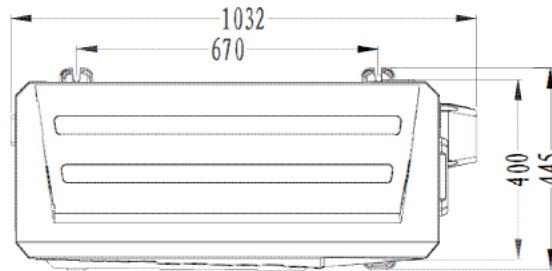
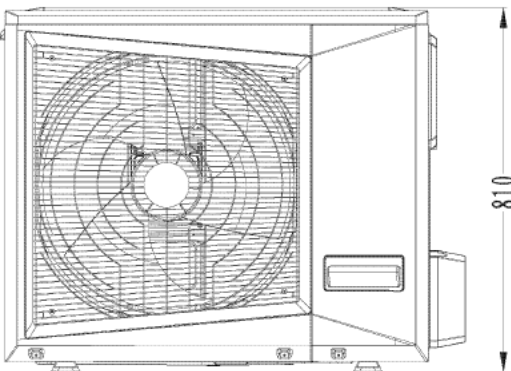
**ICHE - Outdoor Unit**

Unit:mm

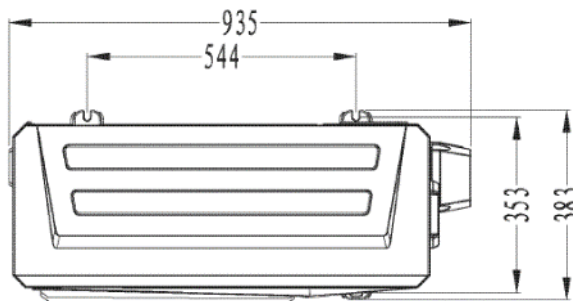
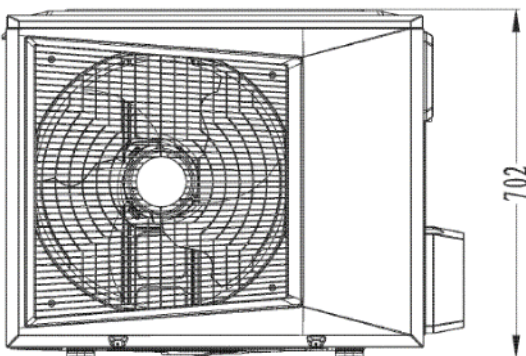
Applicable for models of ICHE648(60)K2A-GMG140(160)



Applicable for models of ICHE636K2A-GMG105



Applicable for models of ICHE624(18)K2A-GMG053(71)



### 3. Electrical Characteristics

#### Electrical Data - ICHE & IELP(MP,HP)

##### Ducted Fan Coil - IELP(MP,HP)

Model	Power Supply <sup>1</sup>					
	Hz	Volts	Min.	Max.	FLA	MOCP
			volts	volts		
IELP618K2A-GCG053	60Hz	208-230	187	253	0.9	5
IEMP624K2A-GCG071	60Hz	208-230	187	253	1.2	5
IEMP636K2A-GCG105	60Hz	208-230	187	253	1.6	5
IEHP648K2A-GCG140	60Hz	208-230	187	253	2.2	5
IEHP660K2A-GCG160	60Hz	208-230	187	253	2.2	5

##### Ducted Fan Coil - ICHE

Model	Power Supply <sup>1</sup>						Compressor
	Hz	Volts	Min.	Max.	MCA	MOCP	RLA
			volts	volts			
ICHE618K2A-GMG053	60Hz	208-230	187	253	6.4	10	4.4
ICHE624K2A-GMG071	60Hz	208-230	187	253	9.6	15	6.7
ICHE636K2A-GMG105	60Hz	208-230	187	253	12.2	20	8.5
ICHE648K2A-GMG140	60Hz	208-230	187	253	20.7	35	14.8
ICHE660K2A-GMG160	60Hz	208-230	187	253	20.7	35	14.8

*Abbreviations:*

MCA: Minimum Circuit Amps; MOCP: Maximum Fuse Amps; RLA: Rated Load Amps; FLA: Full Load Amps