

Best Heat Transfer



DYNACOOOL[®] DYNATHERM[®]

LEAVE ANYTHING TO REIKEN, WATER EXPERTISE !

KCA·MCA SERIES

Air-cooled chiller with heating unit Ver.3



LCD panel display example

Features (Common to HL · L type)

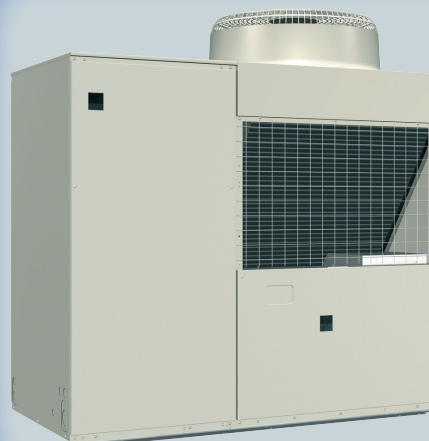
- Improved operability and visibility by adopting a touch panel
- Interface for IOT
MODBUS and SPI communication is Equipped as standard
- Supports multi-stage temperature control process

- Traceability support (option)



KCA-01HL

KCA-05L



MCA-P190C(P250C)-PT-R



MCA-P125B-PT-R



One unit can simultaneously supply to the molding machine mold and under the hopper

Downsizing

Footprint area -20% Machine volume -30%
Compared to the current one hp model

Air-cooled small temperature controller (HL type)

Operating temperature range: 10°C~95°C

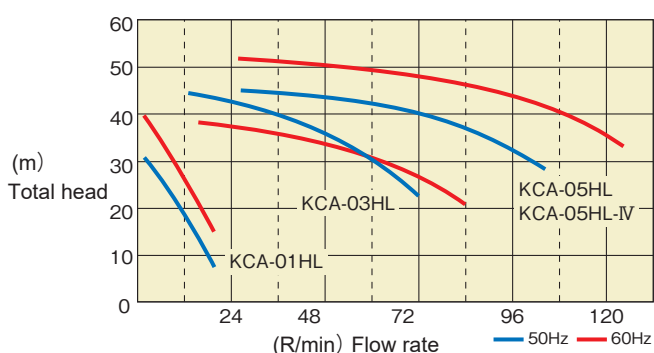
Main Specifications

<Indoor type>

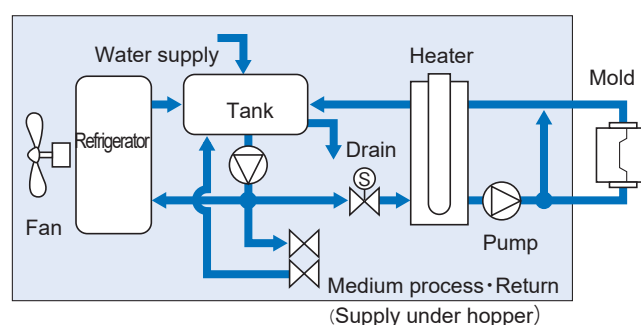
Model		KCA-01HL	KCA-03HL	KCA-05HL	KCA-05HL-IV
Medium (Mold) temperature range		10℃～9.5℃			
Chilled (Mold) water temperature range		7℃～30℃			3℃～25℃
Temperature control (Medium/Chilled water)		PID control / Double-position function			PID control / Inverter control
Medium		Water			
(kW)	10℃	2.0/2.3	5.2/6.0	8.9/9.5	15.0/15.0
(50/60Hz)	20℃	2.7/2.9	7.2/7.8	12.0/12.3	15.0/15.0
Chilling capacity	30℃	3.4/3.5	8.5/8.9	13.6/14.0	15.0/15.0
(kW) Heater capacity		3	6	9	
(R) Tank capacity for chilled water		20	37	49	45
(kW) Compressor output		0.9	2.2	3.75	
(kW) (50/60Hz) Fan output		0.05	0.11/0.145	0.228/0.351	0.088×2
Refrigerant		R407C			
(50/60Hz) Internal circ. pump	(kW) Output	0.43/0.74	0.74/0.74		
	(R/min) Max. flow rate	72/86	105/126		
	(R/min) Max. flow rate under hopper	10			
(50/60Hz) Medium circ. pump	(kW) Output	0.15/0.25	0.74/0.74	1.27/2.2 High-efficiency motor	
	(R/min) Max. flow rate	20/20	72/86	105/126	
	(MPa) Max. output pressure	0.3/0.4	0.44/0.38	0.45/0.51	
Pipe connection size	Medium process・Return	Hose nipple φ10.5 x Two directions	10A x Two directions	10A x Four directions	
	Chilled water process・Return	Hose nipple			Hose nipple φ10.5 x Two directions
	Water supply / Tank drain	15A/15A	15A/20A		
	Over flow／Drain for drain pan	15A/15A	25A/15A		
Utility	(kg) Weight	125	230	300	420
	(kVA) Electricity	7	13.4	21.5	
	Breaker (AT)	30	40	60	75
	Power source	AC200V 50/60Hz・AC220V 60Hz 3φ 3W			
Paint color		Nittoko S4-389			
Alarm		Medium short, Overload (compressor, pump, fan motor), Medium temperature upper/lower limit alarm, Chilled water short, Sensor error, Reverse phase, Chiller alarm (High pressure alarm／Low pressure alarm, Compressor over-heat, Freezing alarm)			
Options		Hose, Nominated-color, Signal light			
(W×D×Hmm) Dimensions		469×584×809	703×640×1135	752×829×1213	800×1100×1397

With Power Cable 5m

Performance curve of medium flow rate.



Flow-chart



We will propose the specifications according to your needs!!

KCA series uses Environmental protection
proof Refrigerant R407C (ODP 0).



Air-cooled small chiller advanced to multi-function and high functionality.

Downsizing

Footprint area -23% Machine volume
-30% Compared to the current 1 hp
model

Air-cooled small chiller (TypeL)

Operating temperature range: 7°C~30°C

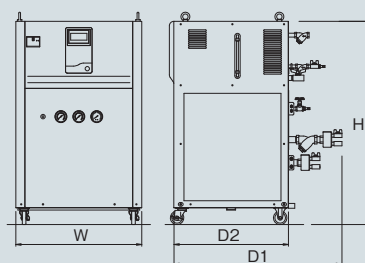
Main Specifications

<Indoor type>

Model		KCA-01L	KCA-03L	KCA-05L
Medium (Mold) temperature range		7°C~30°C		
Medium Temperature control		Double-position function		
Medium		Water		
(kW) (50/60Hz) Chilling capacity	10°C	2.0/2.3	5.2/6.0	8.9/9.5
	20°C	2.7/2.9	7.2/7.8	12.0/12.3
	30°C	3.4/3.5	8.5/8.9	13.6/14.0
(R) Tank capacity for chilled water		20	37	49
(kW) Compressor output		0.9	2.2	3.75
(kW) (50/60Hz) Fan output		0.05	0.11/0.145	0.228/0.351
Refrigerant		R407C		
(50/60Hz) Medium circ. pump	(kW) Output	0.43/0.74		1.27/2.2 High-efficiency motor
	(R/min) Max. flow rate	72/86		105/126
	(MPa) Max. output pressure	0.35/0.38		0.45/0.51
Pipe connection size	Medium process • Return	10A x Two directions		10A x Four directions
	Water supply / Tank drain	15A/15A	15A/20A	
	Over flow / Drain for drain pan	15A/15A	25A/15A	
Utility	(kg) Weight	115	200	275
	Electricity	3.2	5.5	10.3
	Breaker (AT)	20	30	40
	Power source	AC200V 50/60Hz • AC220V 60Hz 3φ 3W		
Paint color		Nittoko S4-389		
Alarm		Medium short, Overload (compressor, pump, fan motor), Medium temperature upper/lower limit alarm, Sensor error, Reverse phase, Chiller alarm (High pressure alarm / Low pressure alarm, Compressor over-heat, Freezing alarm)		
Options		Hose, Nominated-color, Signal light		
(W×D×Hmm) Dimensions		469×584×809	703×640×1135	752×829×1213

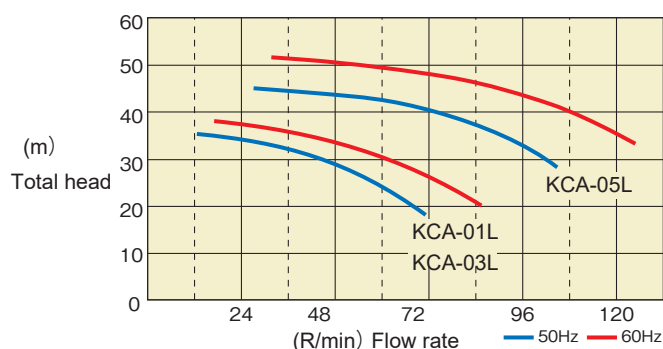
With Power Cable 5m

Outline dimensions

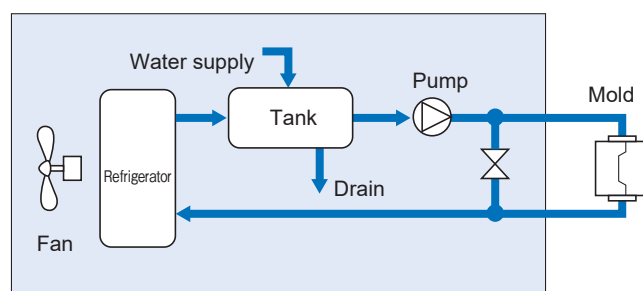


	W	D1	D2	H
KCA-01L	469	(881)	584	809
KCA-01HL	469	(831)	584	809
KCA-03L	703	(950)	640	1135
KCA-03HL	703	(940)	640	1135
KCA-05L	752	(1142)	829	1213
KCA-05HL	752	(1113)	829	1213
KCA-05HL-IV	800	(1401)	1100	1397

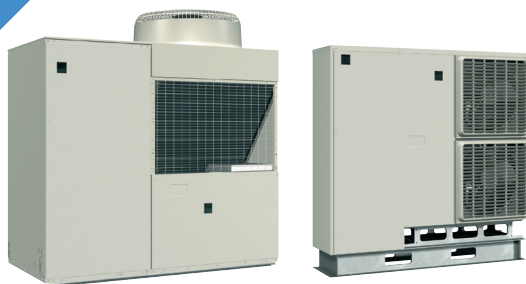
Performance curve of medium flow rate.



low-chart



MCA SERIES



Freeze prevention operation equipped as standard

Equipped with scheduled operation function

Air-cooled chiller

Main Specifications

<Outdoor type>

Model			MCA-P125B-PT-R		MCA-P190C-PT-R		MCA-P250C-PT-R		MCA-P375C-PT-R		MCA-P500C-PT-R	
Medium (Mold) temperature range			6℃～35℃						9℃～35℃			
Medium Temperature control			Double-position function									
Medium			Water									
(kW) (50/60Hz) Chilling capacity※1	10℃		13.4/14.2		18.6/20.7		23.9/26.6		37.2/41.4		47.9/53.2	
	20℃		14.9/15.7		22.4/24.3		28.6/31.7		44.8/48.6		57.2/63.3	
	30℃		16.1/17.0		23.1/25.0		29.8/32.8		46.3/49.9		59.6/65.6	
(R)Tank capacity for chilled water			88		162							
(kW) Compressor output			3.75		5.5		7.5		5.5×2 units		7.5×2 units	
(kW) Fan output			0.088×2		0.38				0.38×2			
Refrigerant			R407C									
Medium circ. pump	(kW) Output		0.75		2.2							
	50Hz	(R/min) flow rate	37	80	60	151	80	151	90	160	120	160
		(m) pump head	27	17	41	27	39	27	38	24	34	24
	60Hz	(R/min) flow rate	37	86	60	151	80	151	90	195	120	195
		(m) pump head	41	24	61	46	58	46	57	32	52	32
Pipe connection size	Medium process・Return		25A		32A							
	Water supply / Tank drain		20A/20A									
	Over flow		25A									
Utility	(kg) Weight		232		341		350		661		711	
	(kVA) (50/60Hz) Electricity		9.0/9.0		14.9/15.2		17.0/18.7		26.0/27.4		27.7/34.6	
	Power source		AC200V 50/60Hz 3φ 3W									
Paint color			Munsell value 5Y8/1 Approximate color)									
Control Method			Micro computer control									
Alarm			High pressure switch, Low pressure switch, Overcurrent relay (compressor, pump), Reverse phase preventer, Freezing protect Thermostat, Gas over-heat protector, Overload (blower), Tank Drought detection									
Options			Salt damage resistant specifications, Refrigerant pressure gauge, Remote control for external operation, Indoor type									
(W×D×Hmm) Dimensions			1514×495×1525		1690×910×1755				2690×905×1995			

※1 Outside temperature 30°C

※When chilled water supply to load apparatus is cut off by solenoid valve etc., Please never fail to install bypass circuit.

※CFC emission control Law (Amended CFC Law) Since 2015, commercial freezer refrigerator (including chillers) are required to undergo simple inspections and periodic inspections.

※The Specifications are subject to change without notice.

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