LASER & LOW BODY Fan Coil Units

2 & 4 pipe system

A complete range from 0.7 kW up to 9.9 kW

CSL00 (Built in)
CSR00 (Wall mounted)
Fan speed selector

CEL00 (Built in)
CER00 (Wall mounted)
Thermostat with manual fan speed and automatic change over

CEL20 (Built in)
CER20 (Wall mounted)
Thermostat with auto. fan speed and automatic change over

CML00 (Built in)
CMR00 (Wall mounted)
Thermostat with manual fan speed and S/W change over

CEL30 (Built in)
CER30 (Wall mounted)
Thermostat with auto. fan speed and automatic change over for modulating valve

FX03 Terminal unit controller
BacNET and N2 Metasys network compatible
(see page 103 for details)

Features

- 6 speed fan
- Cabinet factory fitted
- Valve factory fitted
- Electrical heater factory fitted
- Thermal or modulating valve
- Service valve
- Option front air intake (LASER)
- Optional plenum (LASER)
- Up to 110 pa static pressure (LASER)

Technical features

Model		LASER: YLV, YLV-AF, YLH, YLH-AF, YLV, YLV-AF, YLH, YLH-AF									LOW BODY: YLVR, YLVR				
Sizes		110	112	114	216	218	220	222	224	226	228	110	112	114	216	218
Cooling capacity (1)	W	1 189	1 746	2 291	3 467	3 804	4 664	5 570	6 789	7 599	9 974	942	1 460	2 195	2 718	3 372
Heating capacity (2)	W	1 628	2 226	2 901	4 514	5 176	6 013	7 304	8 617	9 810	12 775	1 319	1 839	2 432	3 270	3 656
Pressure drop (4)	kPa	3.9	7.6	6.5	13.8	13.6	13.1	31.6	39.8	20.9	37.1	6.1	1.4	5.4	9.1	26.2
Power supply	V/Ph/Hz	220 / 1 / 50 + E														
Input	W	46	48	57	81	86	80	119	145	156	200	46	48	57	81	86
Sound power level (3)	dB(A)	49	50	53	53	55	55	59	60	63	67	49	50	53	53	55
Sound pressure level at 1 m (3)	dB(A)	31	32	35	35	37	37	41	42	45	49	31	32	35	35	37
Water connections	inch	1/2"														

Dimensions indicated next page.
(1) Cooling capacities based on 7°C EWT, Δt 5°C - indoor temperature 27°C DB / 19°C WB (2 pipes - high speed fan) (3 rows).
(2) Heating capacities based on 50°C EWT (LASER) / 70°C EWT (LOW BODY) at nominal flow rate indoor temperature 20°C (2 pipes - high speed fan) (3 rows for LASER and 1 row for LOW BODY).
(3) Sound level at high speed fan . (4) In cooling mode. For other conditions contact Johnson Controls

LASER & LOW BODY Fan Coil Units

0.7 to 9.9 kW

Compatibility table / Codes

Model		LASER										LOW BODY				
Sizes		110	112	114	216	218	220	222	224	226	228	110	112	114	216	218
With Cabinet																
YLV-YLH	2/3/4 rows	•	•	•	•	•	•	•	•	•	•					
YLV-YLH/AF Front air intake	2/3/4 rows	•	•	•	•	•	•	•	•	•	•					
YLVR	2/3 rows											•	•	•	•	•
Without Cabinet																
YLV-YLH	2/3/4 rows	•	•	•	•	•	•	•	•	•	•					
YLV-YLH/AF Front air intake	2/3/4 rows	•	•	•	•	•	•	•	•	•	•					
YLVR	2/3 rows											•	•	•	•	•
Options (Factory fitted)																
Coil and heaters																
3 row heating	BA3	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
6h electrical heater (with relay and safety switch)	KBEL	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Built in thermostat																
Fan speed selector	CSL00	•														
Thermostat with manual fan speed and S/W change over	CML00	•														
Thermostat with manual fan speed, dead band, automatic change over	CEL00	•														
Thermostat with automatic fan speed, dead band, automatic change over	CEL20	•														
Thermostat with automatic fan speed, dead band, automatic change over for modulating valve	CEL30	•														
Parallel connection																
For ON/OFF valve one FCU	CBL20	•														
For modulating valve oneFCU	CBL30	•														
2 way valve factory fitted																
For 2 pipe systems ON/OFF	2IA2 (2y)	•														
For 4 pipe systems ON/OFF	2IA2 (4y)	•														
3 way modulating valve factory fitted																
For 2 pipe systems Modulating	3IAM (2y)	•														
For 4 pipe systems Modulating	3IAM (4y)	•														
Shut off valves factory fitted																
For 2 pipe systems	BT (2y)	•														
For 4 pipe systems	BT (4y)	•														
Condensate pump	PC	•														
WS sensor change over for CEL/CER	WS	•														
Minimum temperature thermostat	TM	•														
Accessories (Supplied loose)																
Remote controllers and thermostat (wall mounted)																
Fan speed selector	CSR00	•														
Thermostat with manual fan speed and S/W change over	CMR00	•														
Thermostat with manual fan speed, dead band, automatic change over	CER00	•														
Thermostat with automatic fan speed, dead band, automatic change over	CER20	•														
Thermostat with automatic fan speed, dead band, automatic change over for modulating valve	CER30	•														
Feet and panel (1)																
Set of painted feet	CP1	•	•	•	•	•	•	•	•	•	•					
Set of painted feet + frontal socle	Z11	•	•	•	•	•	•	•	•	•	•					
Vertical painted back panel	PPV1	•	•	•	•	•	•	•	•	•	•					
Horizontal painted back panel	PPH1	•	•	•	•	•	•	•	•	•	•					
Plenums and air intake (1)																
Air intake plenum	PA	•	•	•	•	•	•	•	•	•	•					
Air intake plenum with collars	PAS	•	•	•	•	•	•	•	•	•	•					
90° air intake plenum	PA90	•	•	•	•	•	•	•	•	•	•					
Air intake duct fitting	PCA	•	•	•	•	•	•	•	•	•	•					
Air delivery plenum with collars	PM	•	•	•	•	•	•	•	•	•	•					
90° air delivery plenum	PM90	•	•	•	•	•	•	•	•	•	•					

(1) For check compatibility with the models of FCU see compatibility table on page 109

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Dimensions & Weights

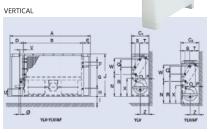
YLV & YLH
- V= vertical
- H= horizontal

YLV-AF & YLH-AF
- AF= front air intake
- V= vertical
- H= horizontal

YLVR
- R= low body
- V= vertical

LASER: YLV - YLV/AF

VERTICAL

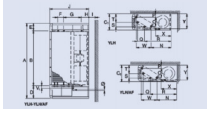


Dim	110	112	114	216	218	220	222	224	226	228
A	646	773	898	1023	1148	1273	1273	1523	1523	1773
B	376	499	624	749	874	999	999	1249	1249	1499
C1	224	224	224	224	224	254	254	254	254	254
C2	233	233	233	233	233	263	263	263	263	263
D	174	174	174	174	174	174	174	174	174	174
E	100	100	100	100	100	100	100	100	100	100
F	40	40	40	40	40	40	40	40	40	40
G	280	280	280	280	280	356	356	356	356	356
H	101	101	101	101	101	101	101	101	101	101
I	85	85	85	85	85	85	85	85	85	85
J	538	538	538	538	538	614	614	614	614	614
N	264	299	356	286	356	299	299	299	299	299
O	113	113	113	113	113	138	138	138	138	138
P	48	48	48	48	48	53	53	53	53	53
Q	87	87	87	87	87	87	87	87	87	87
R	355	355	355	355	355	409	409	409	409	409
S	50	50	50	50	50	50	50	50	50	50
T	117	117	117	117	117	135	135	135	135	135
U	90	90	90	90	90	116	116	116	116	116
V	47	47	47	47	47	47	47	47	47	47
V1	28	28	28	28	28	28	28	28	28	28
W	195	195	195	195	195	238	238	238	238	238
X	213	239	239	239	239	252	252	252	252	252
Y	205	205	205	205	205	235	235	235	235	235
Z	109	109	109	109	109	122	122	122	122	122
Ø	20	20	20	20	20	20	20	20	20	20
kg1	18	20	23	28	31	41	44	52	52	58
kg2	19	21	24	30	32	43	46	54	54	61

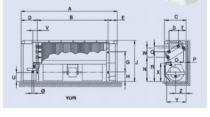
Notes: 1=YLV / YLH - 2=YLV/AF / YLH/AF (All dimensions in mm)

LASER: YLH - YLH/AF

HORIZONTAL



LOW BODY: YLVR



Dim	110	112	114	216	218
A	648	773	898	1023	1148
B	378	499	624	749	874
C	264	264	264	264	264
D	174	174	174	174	174
E	100	100	100	100	100
G	170	170	170	170	170
H	101	101	101	101	101
I	430	430	430	430	430
N	245	245	245	245	245
Q	154	154	154	154	154
P	31	31	31	31	31
Q	47	47	47	47	47
R	304	304	304	304	304
S	88	88	88	88	88
T	87	87	87	87	87
U	65	65	65	65	65
V	47	47	47	47	47
W	84	84	84	84	84
X	214	214	214	214	214
Z	109	109	109	109	109
ø	20	20	20	20	20
kg	15	17	22	23	26

(All dimensions in mm)

Dimensions & Weights

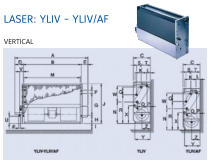
YLV & YLH
- V= vertical
- H= horizontal
- I= without cabinet

YLV-AF & YLH-AF
- AF= front air intake
- V= vertical
- H= horizontal
- I= without cabinet

YLVR
- R= low body
- V= vertical
- I= without cabinet

LASER: YLIV - YLIV/AF

VERTICAL

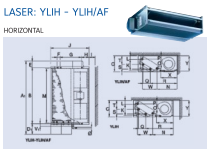


Dim	110	112	114	216	218	220	222	224	226	228
A	585	680	805	930	1055	1180	1180	1430	1430	1680
A1	574	699	824	949	1074	1199	1199	1449	1449	1699
B	374	499	624	749	874	999	999	1249	1249	1499
C	215	215	215	215	215	245	245	245	245	245
D	109	109	109	109	109	109	109	109	109	109
D1	128	128	128	128	128	128	128	128	128	128
E	72	72	72	72	72	72	72	72	72	72
F	40	40	40	40	40	40	40	40	40	40
G	280	280	280	280	280	356	356	356	356	356
H	101	101	101	101	101	101	101	101	101	101
I	85	85	85	85	85	85	85	85	85	85
J	505	505	505	505	505	581	581	581	581	581
K	110	110	110	110	110	125	125	125	125	125
L	55	55	55	55	55	60	60	60	60	60
M	349	474	599	724	849	974	974	1224	1224	1474
N	266	266	266	266	266	293	293	293	293	293
O	133	133	133	133	133	138	138	138	138	138
P	48	48	48	48	48	53	53	53	53	53
Q	87	87	87	87	87	87	87	87	87	87
R	355	355	355	355	355	409	409	409	409	409
S	50	50	50	50	50	50	50	50	50	50
T	117	117	117	117	117	135	135	135	135	135
U	90	90	90	90	90	130	318	130	130	130
V	47	47	47	47	47	47	47	47	47	47
V1	28	28	28	28	28	28	28	28	28	28
W	195	195	195	195	195	238	238	238	238	238
X	219	219	219	219	252	252	252	252	252	252
Y	200	200	200	200	200	230	230	230	230	230
Z	109	109	109	109	109	122	122	122	122	122
Ø	20	20	20	20	20	20	20	20	20	20
Ig	10	13	16	19	22	25	31	38	38	42

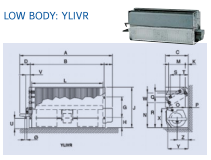
(All dimensions in mm)

LASER: YLIH - YLIH/AF

HORIZONTAL



LOW BODY: YLIVR



Dim	110	112	114	216	218
A	695	680	805	930	1055
B	374	499	624	749	874
C	130	230	130	230	230
D	328	108	328	108	328
E	72	72	72	72	72
F	170	150	170	150	170
H	101	101	101	101	101
I	395	395	395	395	395
K	61	61	61	61	61
L	249	424	599	724	849
M	172	322	172	322	172
N	245	245	245	245	245
O	154	154	154	154	154
P	31	31	31	31	31
Q	47	47	47	47	47
R	304	304	304	304	304
S	88	88	88	88	88
T	87	87	87	87	87
V	47	47	47	47	47
W	84	84	84	84	84
X	214	214	214	214	214
Y	201	201	201	201	201
Z	109	109	109	109	109
Ø	20	20	20	20	20
Ig	9	11	14	16	19

(All dimensions in mm)

LASER and LOW BODY

Compatibility tables

CSL00 (Built in)
CSR00 (Wall mounted)
Fan speed selector

CEL00 (Built in)
CER00 (Wall mounted)
Thermostat with manual fan speed and automatic change over

CEL20 (Built in)
CER20 (Wall mounted)
Thermostat with auto fan speed and automatic change over

CML00 (Built in)
CMR00 (Wall mounted)
Thermostat with manual fan speed and S/W change over

CEL30 (Built in)
CER30 (Wall mounted)
Thermostat with auto fan speed and automatic change over for modulating valve

Features CEL/CER

- Dead band for change over 5°C or 2°C (factory set 2°C)
- Manual fan speeds or automatic (models 20 and 30)
- Thermostated fan control or continuous fan running
- Option water sensor WS for change over on coil (for 2 pipes)
- Led indicated status summer, winter or dead band
- Temperature setting for 7 to 30°C (comfort 20-25°C)
- Plastic pins for limiting temperature range
- Input for window contact
- Input for Economy/ occupancy mode
- Output for remote alarm
- Filter alarm 600 or 1200 running hours (factory set 1200 hours)
- With electrical heater post ventilation
- With Air sensor in the air intake destratification function (CEL only)

Compatibility table Thermostats / Valves / Heaters / Parallel connection / Water sensor / Minimum temperature thermostat

Factory fitted thermostat (built in)	Valves for 2 pipes		Valves for 4 pipes		Heaters	Parallel connection ON/OFF / Modulating		Water sensor	Min. Temp. Thermostat
	JVA2 (2p)	JVAM (2p)	JVA2 (4p)	JVAM (4p)	KHEL	CBL20	CBL30	WS	TM
CSL00 Fan speed selector						•			•
CML00 Thermostat with manual fan speed and S/W change over	•		•			•			•
CEL00 Thermostat with manual fan speed, dead band, automatic change over	•		•		•	•		•	•
CEL20 Thermostat with automatic fan speed, dead band, automatic change over	•		•		•	•		•	•
CEL30 Thermostat with automatic fan speed, dead band, automatic change over for modulating valve		•		•			•	•	•
Remote controllers and thermostats (wall mounted)									
CSR00 Fan speed selector						•			•
CMR00 Thermostat with manual fan speed and S/W change over	•		•			•			•
CER00 Thermostat with manual fan speed, dead band, automatic change over	•		•		•	•		•	•
CER20 Thermostat with automatic fan speed, dead band, automatic change over	•		•		•	•		•	•
CER30 Thermostat with automatic fan speed, dead band, automatic change over for modulating valve		•		•			•	•	•

• *Compatible* ▭ *Not compatible*

LASER and LOW BODY

Compatibility tables

Compatibility Options / Accessories / Models

Code	Designation	STANDARD LASER YLV	YLH	YLV-AF	YLH-AF	STANDARD CONCEALED YLIV	YLIH	YLIV-AF	YLIH-AF	LOW BODY YLVR	YLIVR
Coils and heaters**											
BAT**	Additional 1 row heating	•	•	•	•	•	•	•	•	•	•
KHEL**	Kit electrical heater with safety thermostat and relay	•	•	•	•	•	•	•	•		
Factory fitted thermostat (built in)											
CSL00	Fan speed selector (suit in)	•			•	•			•	•	•
CML00	Thermostat with manual fan speed and S/W change over	•			•	•			•	•	•
CEL00	Thermostat with manual fan speed, dead band, automatic change over	Compatible with electrical heaters								•	•
CEL20	Thermostat with automatic fan speed, dead band, automatic change over	Compatible with electrical heaters								•	•
CEL30	Thermostat with automatic fan speed, dead band, automatic change over for modulating valves	•			•	•			•	•	•
CBL20	Parallel connection for ON/OFF valve	•	•	•	•	•	•	•	•	•	•
CBL30	Parallel connection for modulating valve	•	•	•	•	•	•	•	•	•	•
Remote controllers and thermostats (wall mounted)											
CSR00	Fan speed selector (wall mounted)	•	•	•	•	•	•	•	•	•	•
CMR00	Thermostat with manual fan speed and S/W change over	•	•	•	•	•	•	•	•	•	•
CER00	Thermostat with manual fan speed, dead band, automatic change over	Compatible with electrical heaters								•	•
CER20	Thermostat with automatic fan speed, dead band, automatic change over	Compatible with electrical heaters								•	•
CER30	Thermostat with automatic fan speed, dead band, automatic change over for modulating valves	•			•	•			•	•	•
Valves / Condensate pump / Water sensor / Minimum temperature thermostat (Factory fitted)											
JVA2 (2p)	3-way 4-ports on/off valves for 2-pipe systems	•	•	•	•	•	•	•	•	•	•
JVA2 (4p)	3-way 4-ports on/off valves for 4-pipe systems	•	•	•	•	•	•	•	•	•	•
JVAM (2p)	3-way 4-ports modulating valves for 2-pipe systems	•	•	•	•	•	•	•	•	•	•
JVAM (4p)	3-way 4-ports modulating valves for 4-pipe systems	•	•	•	•	•	•	•	•	•	•
DT (2p)	Shut-off valves for 2-pipe systems (in addition to JVA2/JVAM valves)	•	•	•	•	•	•	•	•	•	•
DT (4p)	Shut-off valves for 4-pipe systems (in addition to JVA2/JVAM valves)	•	•	•	•	•	•	•	•	•	•
PC	Condensate pump	•	•	•	•	•	•	•	•	•	•
WS	Water sensor	Compatible with CEL/CER									
TM	Minimum temperature thermostat	•	•	•	•	•	•	•	•	•	•
Feet and panels											
CPI	Set of painted feet	•				•					
ZL1	Set of feet + frontal socle	•				•					
PPV1	Vertical painted back panel	•		•						•	
PPH1	Horizontal painted back panel		•		•						
External air intake											
PA	Air intake plenum						•				
FAS	Air intake plenum collars						•				
PA90	90° air intake plenum						•				
RCA	Air intake duct fitting						•				
PM	Air delivery plenum with collars					•	•	•	•		•
PM90	90° air delivery plenum					•	•	•	•		•

• *Compatible*
▭ *Compatible with conditions*
Not compatible
** *Maximum of rows is indicated in the documentation, the maximum number of rows includes the heating row or electrical heater.*