

# IN-LINE FANS – ILHT Series, Backward Curved Fans with Standard Motors. 400°C/2 h Rated



NEW



400°C/2h

## Description

The ILHT range of direct drive in-line fans are designed to withstand the extract of air streams (only air stream within fan enclosure) of 400° C for a minimum period of two hours. All models are supplied with the motor located out of the air stream mounted on the external face of the casing.

All models are certified for 400° C/2hr for the purpose of extracting hot smoke in the case of a fire. The ILHT series of centrifugal in-line fans offers a truly flexible solution to installation whereby the configuration of both the inlet and discharge ports can be changed by simply altering the positioning of casing side panels.

## Applications

The ILHT Series are suitable for a wide variety of applications including commercial kitchen and car park extract ventilation systems.

Certified by CTICM Exp. 02A047.

- SEVERAL INSTALLATION OPTIONS
- EASY INSTALLATION
- 400°C/2h

## Construction

### Casing

The casing of the ILHT fans is manufactured from high grade robust galvanised steel and are suitable for direct connection in-line with standard nominal rectangular steel ducting. Due to the flexible design and configuration the ILHT units can be installed in any position, both horizontal or vertical, and are suitable for both indoor and outdoor mounted installations.

### Impeller

All ILHT fans incorporate a centrifugal backward curved impeller manufactured from high grade galvanised steel. The motor is directly coupled to the impeller which is dynamically balanced.

### Motors

All motors are designed for continuous operation in ambient air temperatures up to +70° C

and are manufactured in accordance with European CEI standards.

The following motor specifications include:

- Single speed models available with 230V or 400V 50Hz Three Phase motors.
- Two speed models available with 400V 50Hz Three Phase motors.
- All motors are Class F, IP-55.

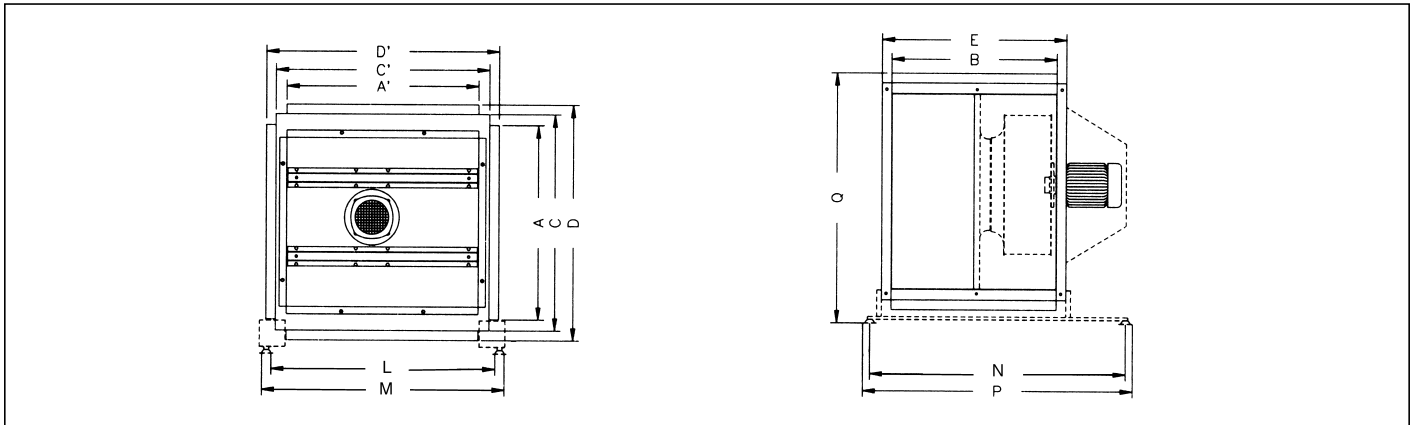
## Technical characteristics

Model Type	Nom. Speed 1 (r.p.m.)	Motor power Speed 1 (kW)	Maximum abs. current Speed 1 (A) at 400 V	Nom. Speed 2 (r.p.m.)	Motor power Speed 2 (kW)	Maximum abs. current Speed 2 (A) 400 V	Maximum air volume m <sup>3</sup> /h	Sound pressure level dB(A)*
SINGLE SPEED, 4 POLES								
ILHT/4-035	1415	0,55	1,8				3500	56
ILHT/4-050	1415	0,75	2,2				5000	59
ILHT/4-060	1420	1,5	2,7				7000	62
ILHT/4-065	1430	2,2	4,8				10000	64
SINGLE SPEED, 6 POLES								
ILHT/6-035	940	0,25	1,1				2333	50
ILHT/6-050	940	0,25	1,1				3333	51
ILHT/6-060	940	0,37	1,2				4667	53
ILHT/6-065	930	0,75	2,4				6667	56
ILHT/6-085	950	1,1	3,3				8400	58
ILHT/6-110	940	2,2	5,4				12500	60
ILHT/6-140	960	3	6,9				15000	63
ILHT/6-190	955	5,5	11,9				19000	64
SINGLE SPEED, 8 POLES								
ILHT/8-065	700	0,37	1,6				5000	49
ILHT/8-085	700	0,55	2,5				6300	52
ILHT/8-110	700	1,1	3,5				9375	54
ILHT/8-140	695	1,5	4,6				11250	57
ILHT/8-190	720	3	7,8				14250	58
TWO SPEED, 4/6 POLES								
ILHT/4/6-065	1445	3	6,3	975	1	3,1	10000	64
TWO SPEED, 4/8 POLES								
ILHT/4/8-035	1360	0,55	1,6	690	0,11	0,6	3500	56
ILHT/4/8-050	1380	0,75	2,0	690	0,16	0,7	5000	59
ILHT/4/8-060	1390	1,70	4,0	700	0,35	1,6	7000	62
ILHT/4/8-065	1415	2,8	6,4	715	0,6	2,2	10000	64
TWO SPEED, 6/8 POLES								
ILHT/6/8-035	940	0,45	1,6	700	0,2	1,0	2333	50
ILHT/6/8-050	940	0,45	1,6	700	0,2	1,0	3333	51
ILHT/6/8-060	930	0,45	1,6	690	0,2	1,0	4667	53
ILHT/6/8-065	950	0,9	2,5	720	0,4	1,8	6667	56
ILHT/6/8-085	965	1,2	3,5	720	0,5	2,1	8400	58
ILHT/6/8-110	985	2,6	9,0	725	1,3	5,7	12500	60
TWO SPEED, 6/12 POLES								
ILHT/6/12-110	950	4	9,4	470	0,75	3,4	12500	60
ILHT/6/12-140	950	4	9,4	470	0,75	3,4	15000	63
ILHT/6/12-190	975	5,5	14,3	480	1,0	3,4	19000	64

\*At 6 m from the outlet

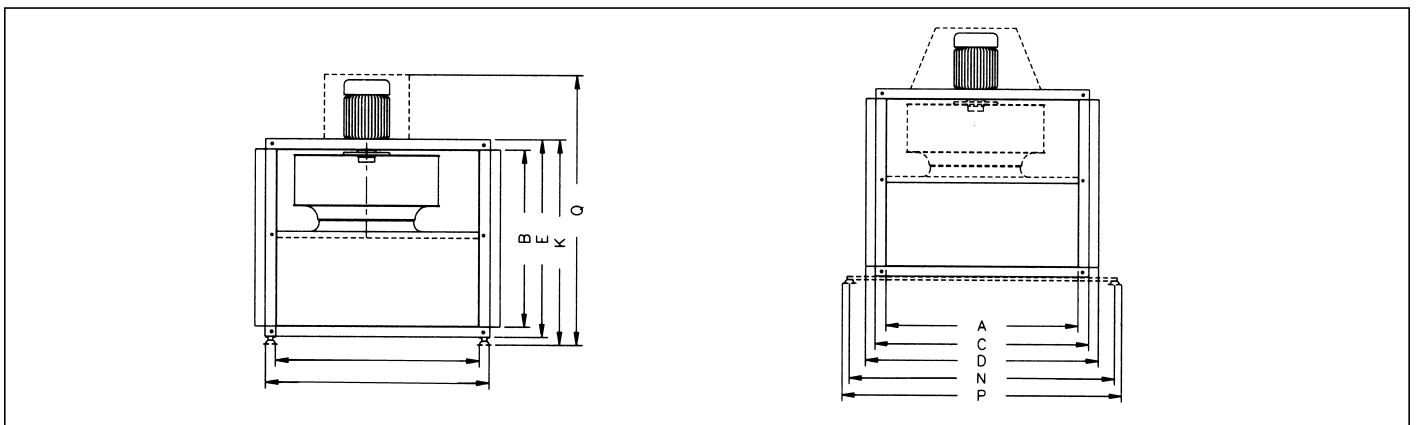
## ■ Dimensions (mm)

Mounting configuration with horizontal motor shaft.



Type	A	B	C	D	E	L	M	N	P	Q	Weight (kg)
035	700	600	780	850	675	727	927	1038	1122	928	70
050	700	600	780	850	675	727	927	1038	1122	928	90
060	800	700	880	950	775	827	1027	1182	1266	1028	110
065	800	700	880	950	775	827	1027	1182	1266	1028	135
085	900	800	1015	1085	875	962	1162	1330	1414	1175	145
110	900	800	1015	1085	875	962	1162	1330	1414	1175	160
140	1000	900	1115	1185	975	1062	1262	1430	1514	1275	175
190	1100	1000	1215	1315	1075	1162	1362	1530	1614	1375	210

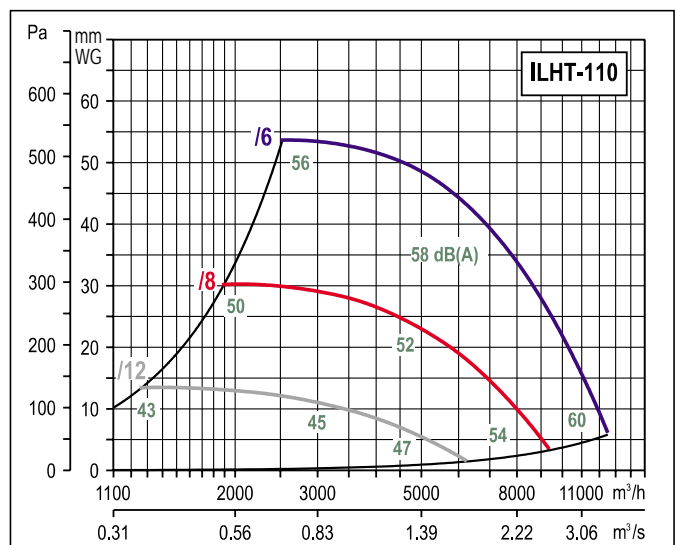
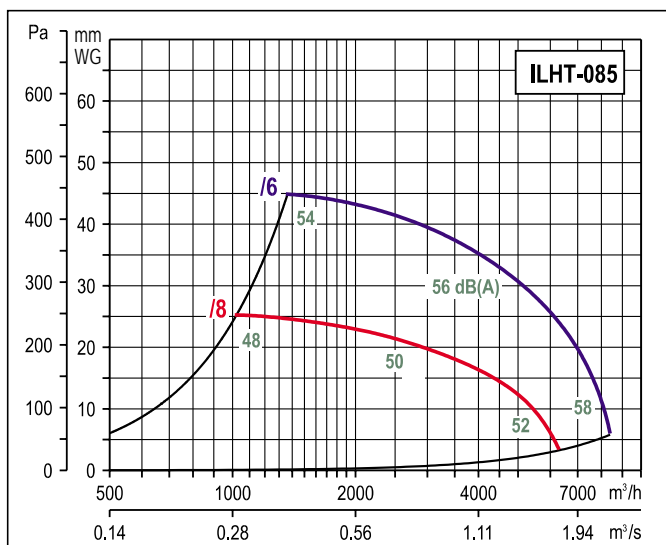
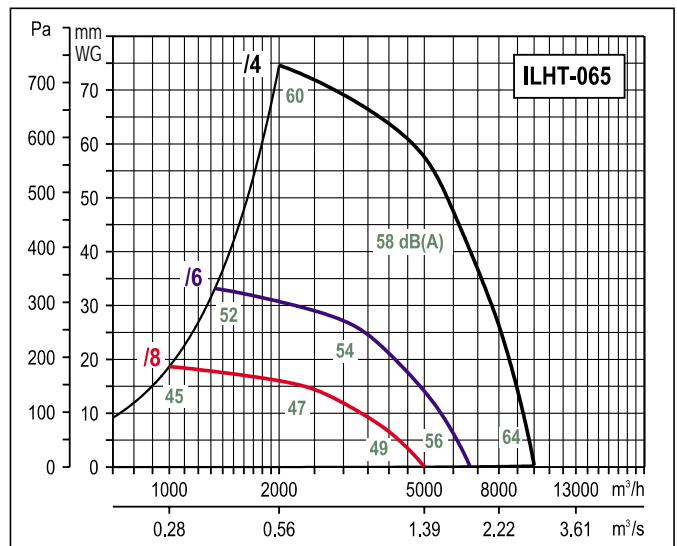
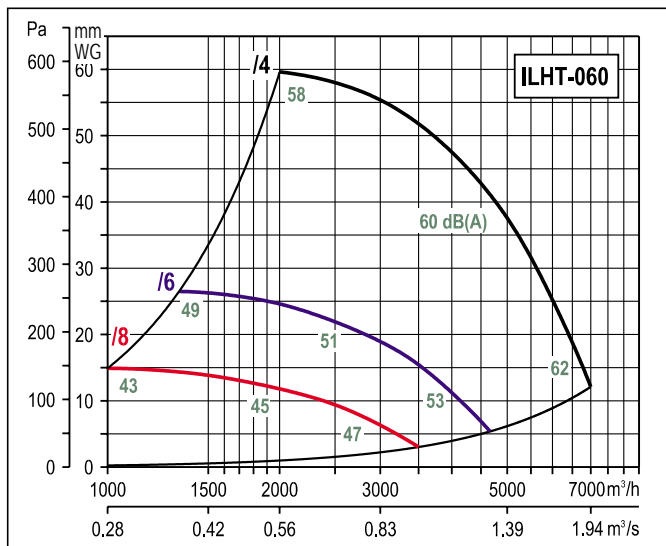
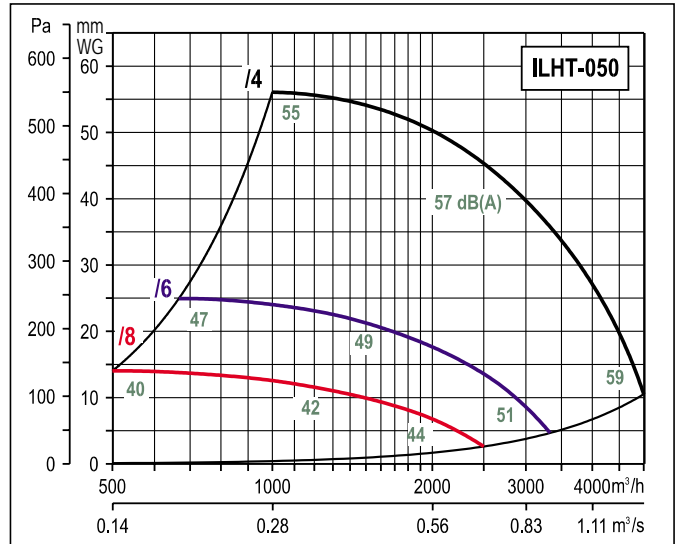
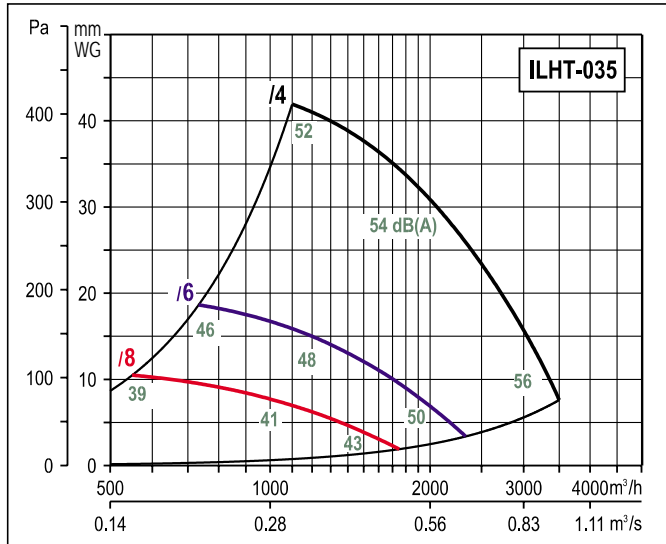
Mounting configuration with vertical motor shaft.



Type	A	B	C	D	E	K	L	M	N	P	Q	Weight (kg)
035	700	600	780	850	675	722	587	787	1038	1122	928	70
050	700	600	780	850	675	722	587	787	1038	1122	928	90
060	800	700	880	950	775	822	687	887	1182	1266	1028	110
065	800	700	880	950	775	822	687	887	1182	1266	1028	135
085	900	800	1015	1085	875	934	822	1022	1330	1414	1175	145
110	900	800	1015	1085	875	934	822	1022	1330	1414	1175	160
140	1000	900	1115	1185	975	1034	922	1122	1430	1514	1275	175
190	1100	1000	1215	1315	1075	1134	1022	1222	1530	1614	1375	210

## ■ Performance curves

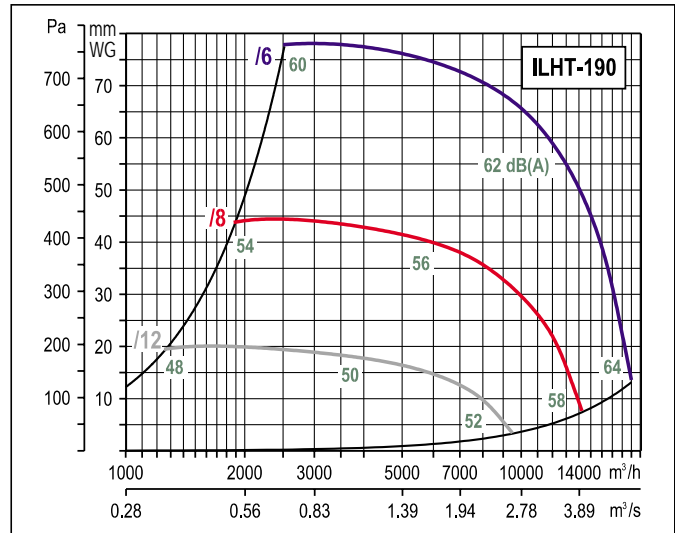
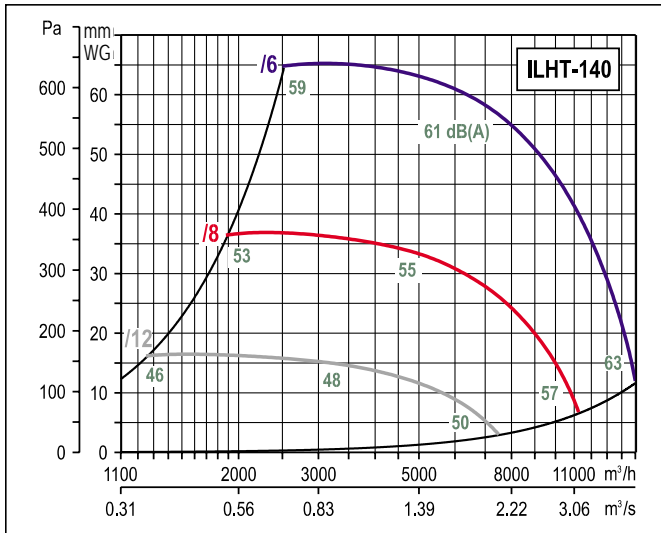
- Q = Air volume in, m<sup>3</sup>/hr and m<sup>3</sup>/s
- Pe = Static pressure in mmWG and Pa.
- Dry air at 20 °C and 760 mmHg.
- Air flow data in accordance with the following standards: UNE 100-212-89, BS 848, Part 1, AMCA 210-85 and ASHRAE 51-1985.



Sound level measured at a distance of 6 m. from discharge.

## Performance curves

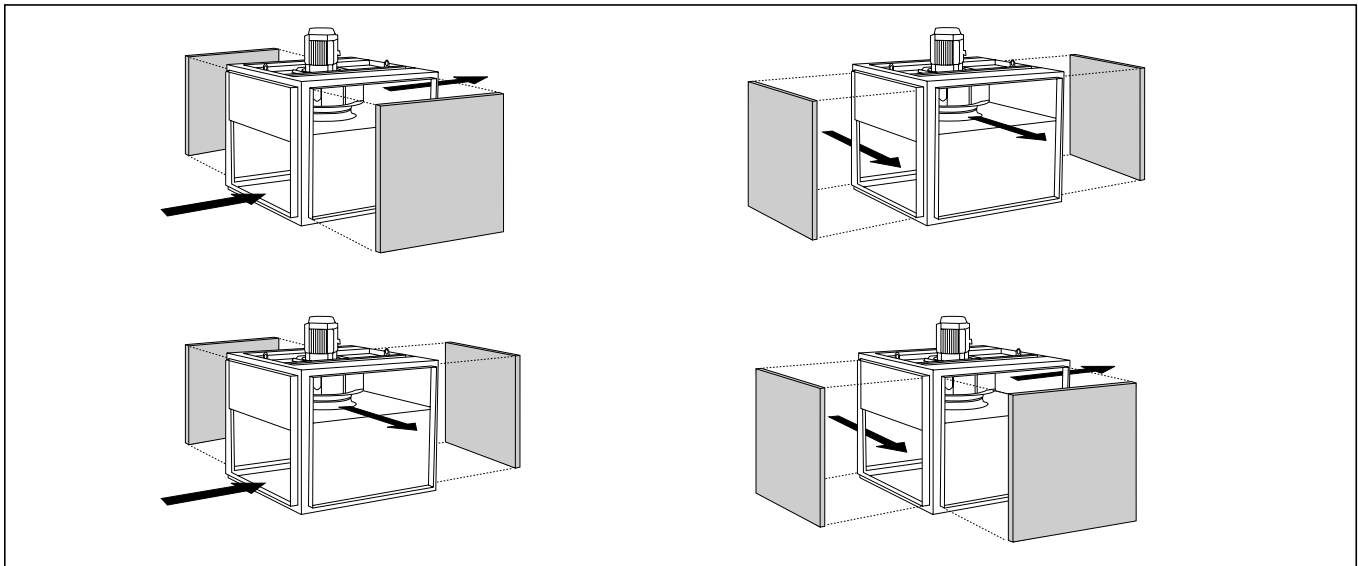
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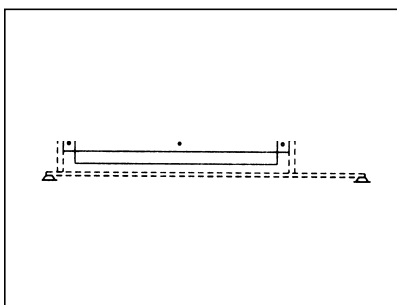
## Installation options

The ILHT series of centrifugal in-line fans offers a truly flexible solution to installation whereby the configuration of both the inlet and discharge ports can be changed by simply altering the positioning of casing side panels.



## MOUNTING ACCESSORIES

### Mounting support



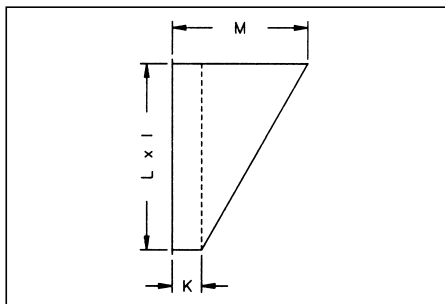
Type	Mounting support
035	ILHT-SUPPORT - 035
050	ILHT-SUPPORT - 035
060	ILHT-SUPPORT - 060
065	ILHT-SUPPORT - 065
085	ILHT-SUPPORT - 085
110	ILHT-SUPPORT - 085
140	ILHT-SUPPORT - 140
190	ILHT-SUPPORT - 190

### Rectangular duct connection flange

Type	Duct connection flange
035	ILHT-CON. FLANGE - 035
050	ILHT-CON. FLANGE - 035
060	ILHT-CON. FLANGE - 060
065	ILHT-CON. FLANGE - 065
085	ILHT-CON. FLANGE - 085
110	ILHT-CON. FLANGE - 085
140	ILHT-CON. FLANGE - 140
190	ILHT-CON. FLANGE - 190

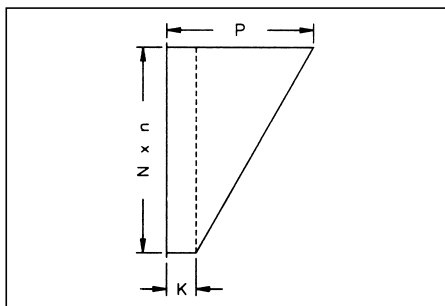
## MOUNTING ACCESSORIES

### ■ Vertical mounted, discharge protection grille



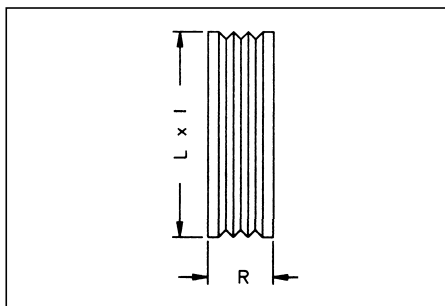
Type	Discharge protection grille	K	L	I	M
035	ILHT-V-MOUNTED- 035	140	605	705	490
050	ILHT-V-MOUNTED- 035	140	605	705	490
060	ILHT-V-MOUNTED- 060	140	705	805	550
065	ILHT-V-MOUNTED- 060	140	705	805	550
085	ILHT-V-MOUNTED- 085	140	806	906	605
110	ILHT-V-MOUNTED- 085	140	806	906	605
140	ILHT-V-MOUNTED- 140	140	906	1006	665
190	ILHT-V-MOUNTED- 190	140	1006	1106	725

### ■ Horizontal mounted, discharge protection grille



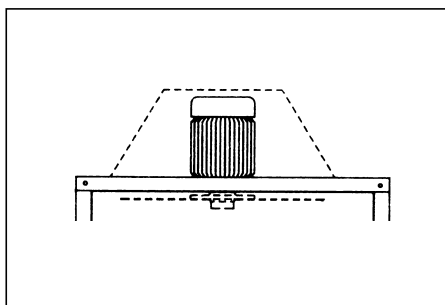
Type	Discharge protection grille	K	N	n	P
035	ILHT-H-MOUNTED- 035	140	705	605	550
050	ILHT-H-MOUNTED- 035	140	705	605	550
060	ILHT-H-MOUNTED- 060	140	805	705	605
065	ILHT-H-MOUNTED- 060	140	805	705	605
085	ILHT-H-MOUNTED- 085	140	906	806	665
110	ILHT-H-MOUNTED- 085	140	906	806	665
140	ILHT-H-MOUNTED- 140	140	1006	906	725
190	ILHT-H-MOUNTED- 190	140	1106	1006	780

### ■ Flexible rectangular flanged duct connector



Type	Flexible flanged duct connector	L	I	R
035	ILHT-FLEXIBLE FLANGED- 700X600	605	705	220
050	ILHT-FLEXIBLE FLANGED- 700X600	605	705	220
060	ILHT-FLEXIBLE FLANGED- 800X700	705	805	220
065	ILHT-FLEXIBLE FLANGED- 800X700	705	805	220
085	ILHT-FLEXIBLE FLANGED- 900X800	806	906	220
110	ILHT-FLEXIBLE FLANGED- 900X800	806	906	220
140	ILHT-FLEXIBLE FLANGED- 1000X900	906	1006	220
190	ILHT-FLEXIBLE FLANGED- 1100X1000	1006	1106	220

### ■ Motor cover (for outdoor mounted installations)



Type	Motor cover
035	ILHT-MOTOR COVER-V- 035
050	ILHT-MOTOR COVER-V- 035
060	ILHT-MOTOR COVER-V- 060
065	ILHT-MOTOR COVER-V- 060
085	ILHT-MOTOR COVER-V- 085
110	ILHT-MOTOR COVER-V- 085
140	ILHT-MOTOR COVER-V- 140
190	ILHT-MOTOR COVER-V- 140