

S. NO.

MAGNET HORN



IBUKI KOGYO CO., LTD.

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TABLE OF PLAN
計画表

ORDER NO.
工事番号

S. NO.

MAGNET HORN
マグネットホーン

NAME 品名	PRESSURE 圧力 (MPa)	DWG. NO. 図面番号	QUANTITY PER VESS. 数量/1隻	PAINTING 塗装色
Whistle (Above 130dB) 汽笛 (130dB 以上) HORN UNIT E150H ホーンユニット		OUTLINE 外形図 SOJ-8710A, A-1285 CONSTRUCTION 構造図 SSJ-8710 PARTS LIST 部品表 PJ-8710	1	WHITE
MAGNET HORN マグネットホーン WITH HEATER (300W) ヒーター付		OUTLINE 外形図 SOJ-8710B CONSTRUCTION 構造図 SSJ-8710B PARTS LIST 部品表 PJ-8710B	1	2.5G7/2
		OUTLINE 外形図 CONSTRUCTION 構造図 PARTS LIST 部品表		
SYSTEM DIAGRAM 系統図		SWJ-14-12725		

SOURCE 電 源	MAIN CIRCUIT 主回路	DC24V AC220V, 1φ, 60Hz	
	CONTROL CIRCUIT 操作回路	DC24V AC220V, 1φ, 60Hz	
NOTE 注 記	NAME PLATE 銘板	ENGLISH 英 文	

INSTRUCTIONS

1. Items relating to safety

1. 1. WARNINGS

Completely clean the air line to remove all dusts and rusts, etc. from the line before installing the whistle.

Always switch off power first when working on the whistle.
Make sure that no voltage exists.

Before sounding the whistle for test, be sure the area is cleared of all unauthorized personal and all personal in the area wear ear protection (e.g. earplugs).

2. Electric shock safety guidelines

2.1. General

2.1.1. Effect of electric shock to human body

- (1) Electric shock has very high degree of risk of bodily injury.

Even relatively low, the current flowing through heart, lung and other critical organs can result in personal injury or even death.

- (2) In general, when working with low AC volts, for example, around 100 volts, people tend to ignore the risk involved.

Remember that a power source capable of flowing 50 mA at 100 VAC, 60/50 Hz can be dangerous to human body.

100 mA current can result in serious personal injury from electric shock.

2.1.2. Symptoms of electric shock

Typical symptoms of electric shock are usually not chronic.

In the case of unconsciousness or apparent death, do not give the victim of electric shock up for dead.

Instead, immediately render first aid and resuscitation such as artificial respiration and heart massage.

Continuous resuscitation for several hours may revive by victim.

- (1) In the case of breathless, perform artificial respiration until the respiratory center recovers the respiratory function.
- (2) In the case of serious electric shock, the face of the victim turns pale, the heart pulsates faintly or stops.
- (3) In the case of unconsciousness, the victim's body becomes rigor in three minutes.

2.2. To prevent electric shock

Personnel in charge of operation, maintenance, repair, etc., of the whistle and the supervisor must strictly observe applicable electric safety standards and regulations and implement the following special precautions and handling techniques to assure positive prevention of electric shock.

- (1) Personal injury and property damage caused by electric shock often resulted from live power line which should have been off.

Verify that the power switch is off and verify that power line is dead by using a voltmeter and the like.

- (2) Do not solely rely on safety and protective system.
Always protect against failure of these system.
- (3) Wear rubberized/insulated gloves and shoes.
Place insulating material (e.g. rubber mat) between the surface.
- (4) Do not turn on and off power during service except for unavoidable case.
When power is off during service, the work area should be designated to caution people that power must be kept off.
- (5) When operating the power switch, always use the right hand while keeping the left hand off the body (stretch the left hand backward).
- (6) Always have another member of staff stand near the power disconnecting device capable of turning off power quickly in the case of electric shock.

INSTRUCTIONS

IBUKI E150 TYPE MAGNET HORN

(D.C.24V with heater)

(Whistle for vessels of 20m or more but less than 75m)

1. Description and operation

The IBUKI E150 type magnet horn is an electro-magnet operated whistle, and consists of an oscillator unit, a horn unit, a blowing switch and a heater switch.

When the power is turned on, the oscillator unit initiates oscillation at a preset frequency which then activates two electric magnets in the horn unit alternatively.

This causes a moving core and a connected diaphragm to vibrate.

Signals can be emitted by switching "ON" and "OFF" the power source.

2. Installation

(1) The horn unit shall be placed as high as practicable on the vessel, in order to reduce interception of the emitted sound by obstructions and also to minimize hearing damage risk to personnel.

(2) The horn unit shall be firmly fixed to a firm horizontal surface using four M10 bolts and nuts.

The magnet head of the unit must be uppermost with the mounting plate at the bottom. (This avoids retention of water inside the horn)

(3) The oscillator unit is drip-proof type and must be installed indoors.

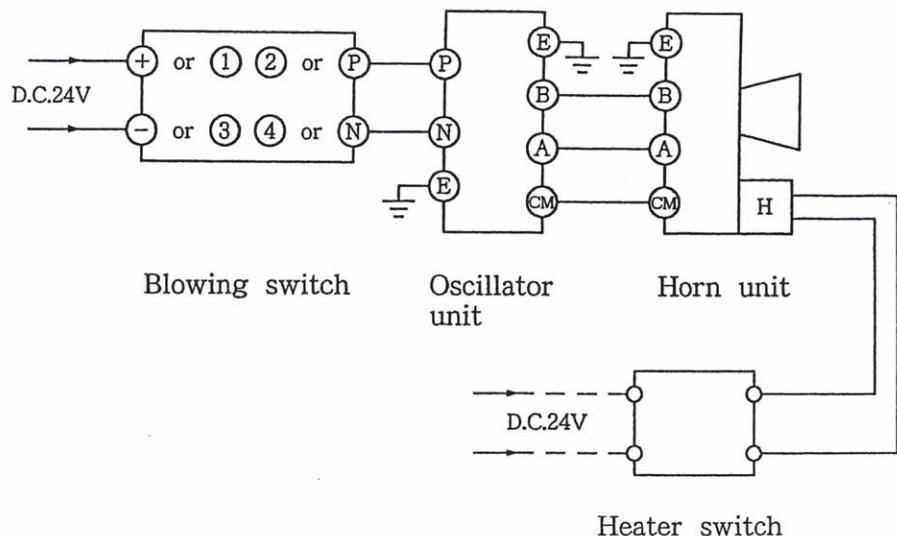
(4) The circuit cable shall be of sufficient current capacity. (D.C.24V, 16A ; for example, when length between the oscillator unit and the horn unit is about 20m, 5.5 m² three-cores cable shall be used)

Should there be radio wave interference, use a shielding wire , and should be grounded. (Magnt compass safe distance is 1.0m)

(5) Ensure the polarity of the power source and wire according to the marks given on the terminals.

3. Precautions

- (1) Ensure the polarity of the power source and wire according to the marks given on the terminals.



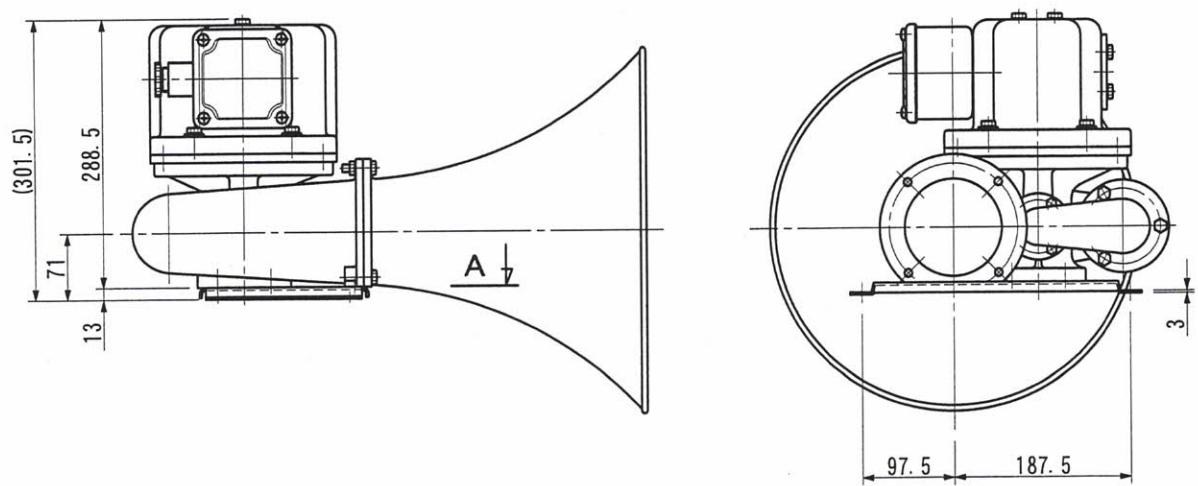
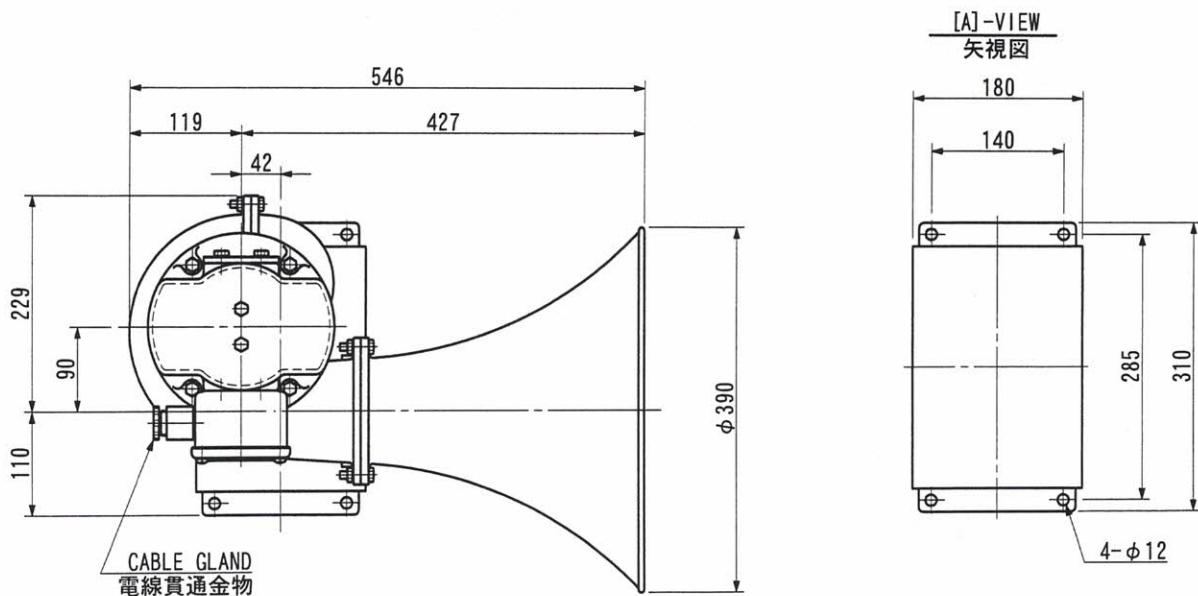
- (2) Ensure the voltage of the power source to be the specified voltage at the converter.
(3) If the circuit breaker of the oscillator unit is activated, check to see if the circuit is normal.

If there is no problem, wait for about 3 minutes and then push the black button located on the upper right-hand side to return the circuit to the normal operation.

- (4) The heater is to be used only when the ambient temperature is below 0°C.

E150	MAGNET HORN	HORN UNIT	WHISTLE (Above 130dB)	OUTLINE VIEW	MASS 質量
	マグネットホーン	ホーンユニット	汽笛(130dB以上)	外 形 図	15 kg
1/3 rd-OCTAVE BANDLEVEL オクターブバンドレベル	130dB/1m	FUNDAMENTAL FREQUENCY 基本周波数	APPROX. 320Hz 約	PROTECTION GRADE 保護等級	IP 56
SOURCE 電 源	DC 24V	CURRENT 電 流	16 A		

ANIVOCAL
単位:mm



TYPE APPROVAL No. 1519



IBUKI KOGYO CO., LTD.
伊吹工業株式会社

D. W. N.	M. Kawamura	C. K. D.	Y. Ueda	C. K. D.	
DATE	APR.-01. 2013	SCALE	1/8	DWG. NO	SOJ-8710A

E150

MAGNET HORN HORN UNIT
マグネットホーン ホーンユニット

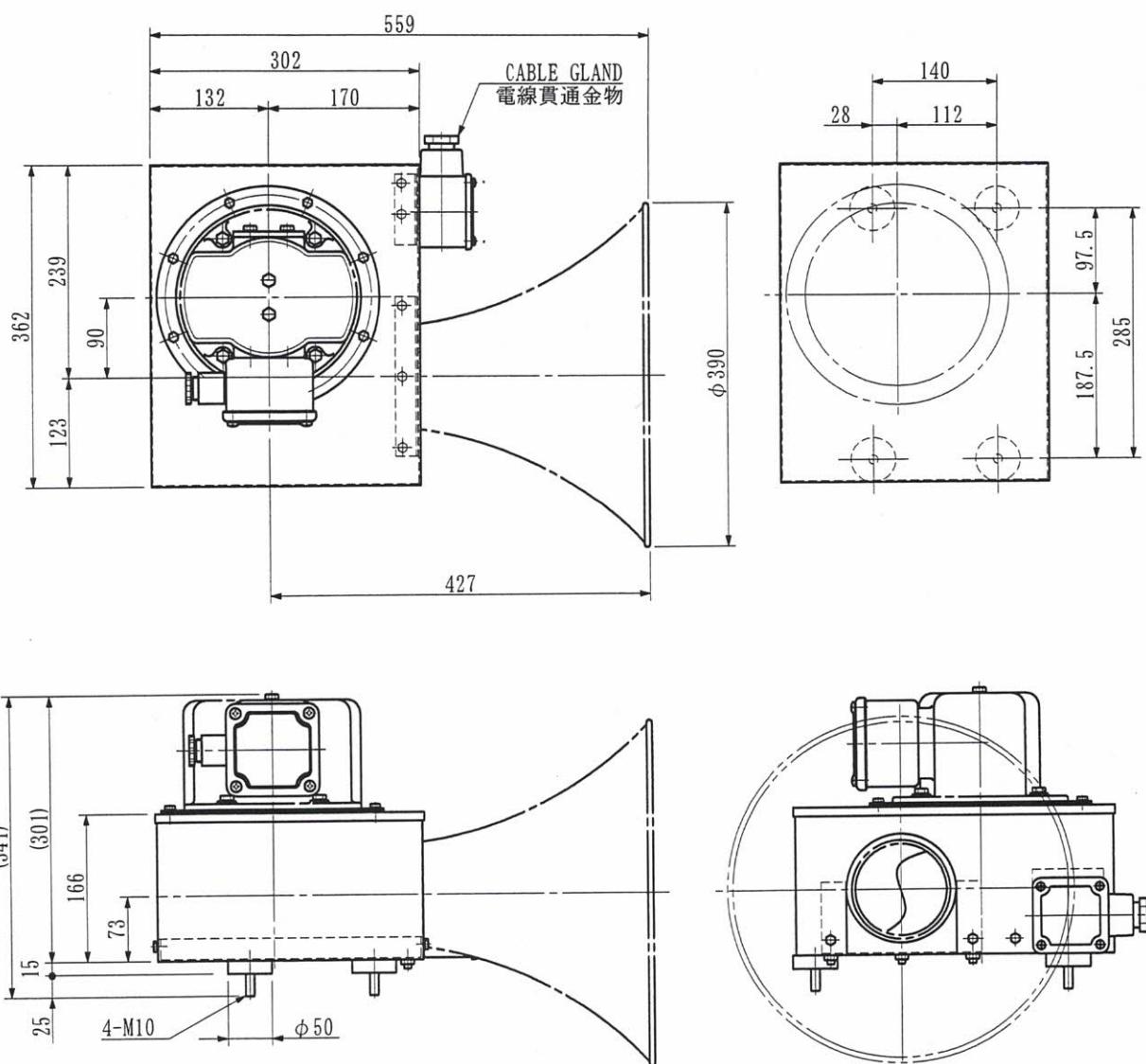
HEATING DEVICE
ヒータ装置

HEATER (300W)
ヒータ

MASS
質量

7 kg

ANIVOCAL
単位: mm



C. K. D.

D. W. N.

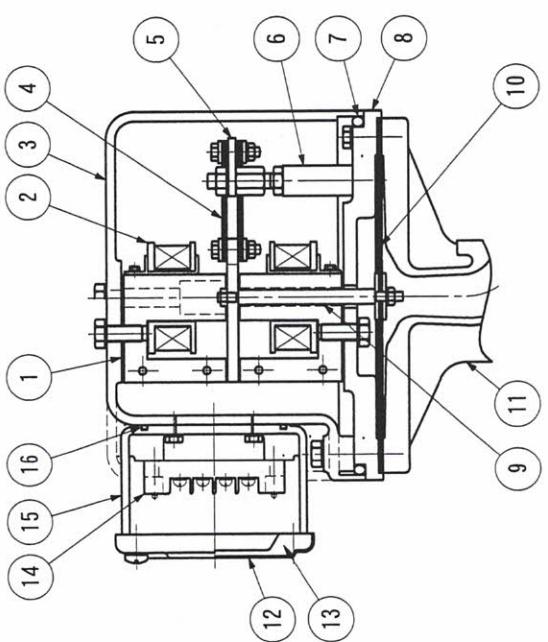
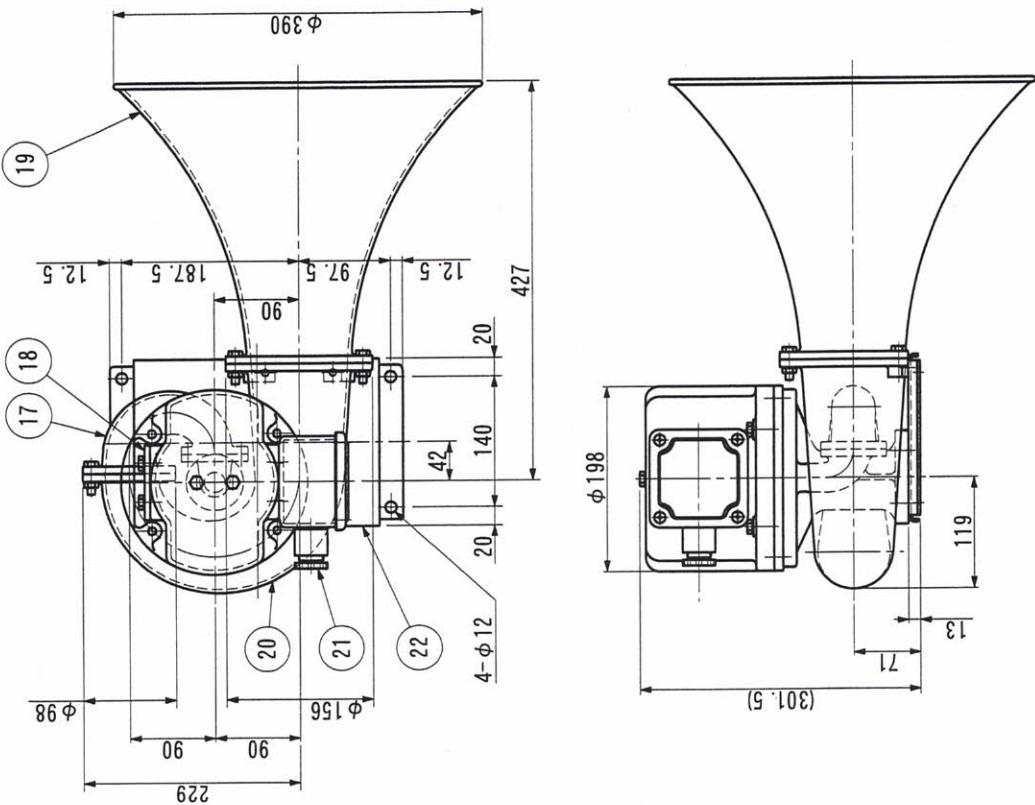
Y.
UEDA

WORK NO.

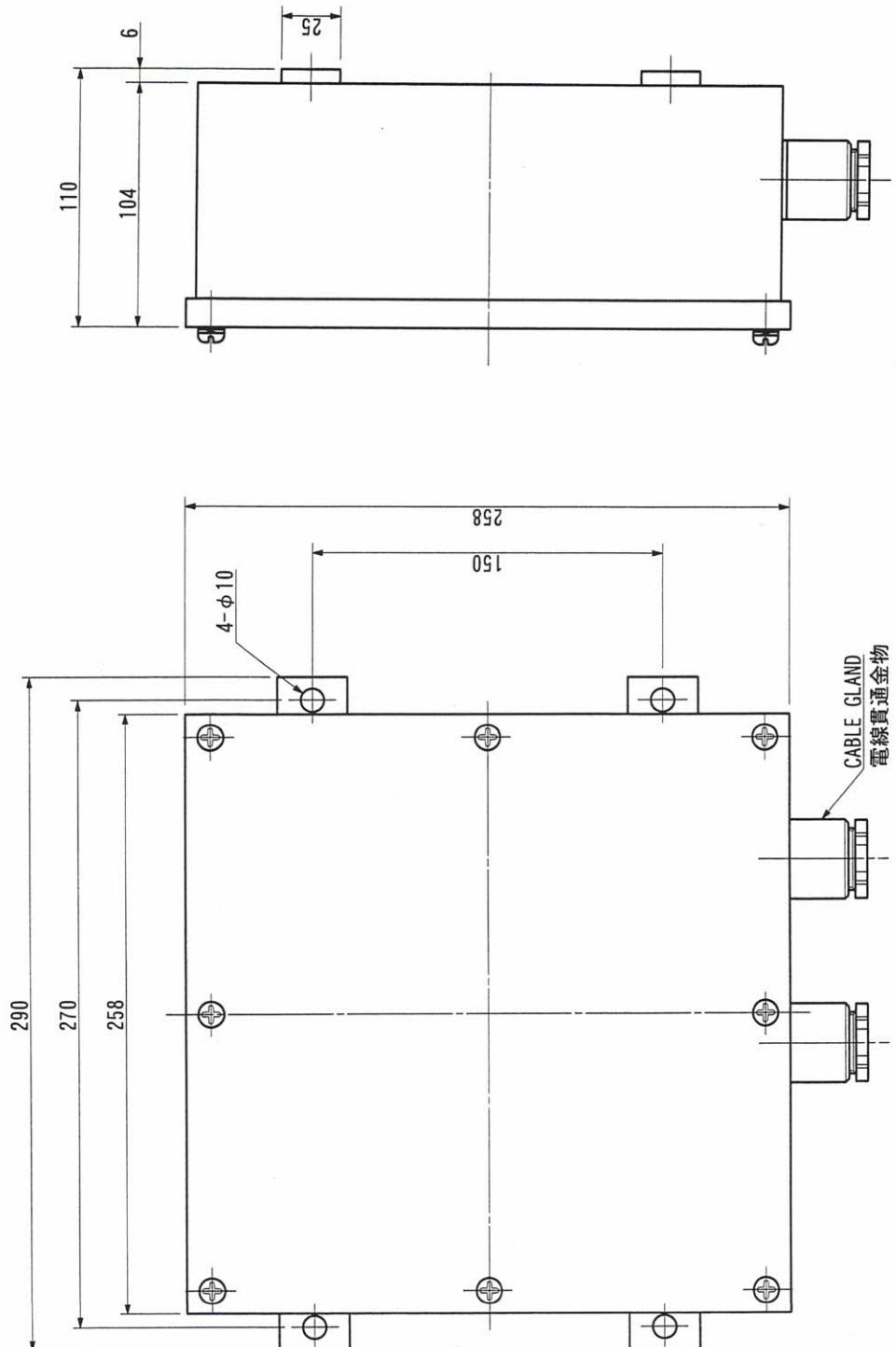
IBUKI KOGYO CO., LTD.

DWG. NO.

A-1285

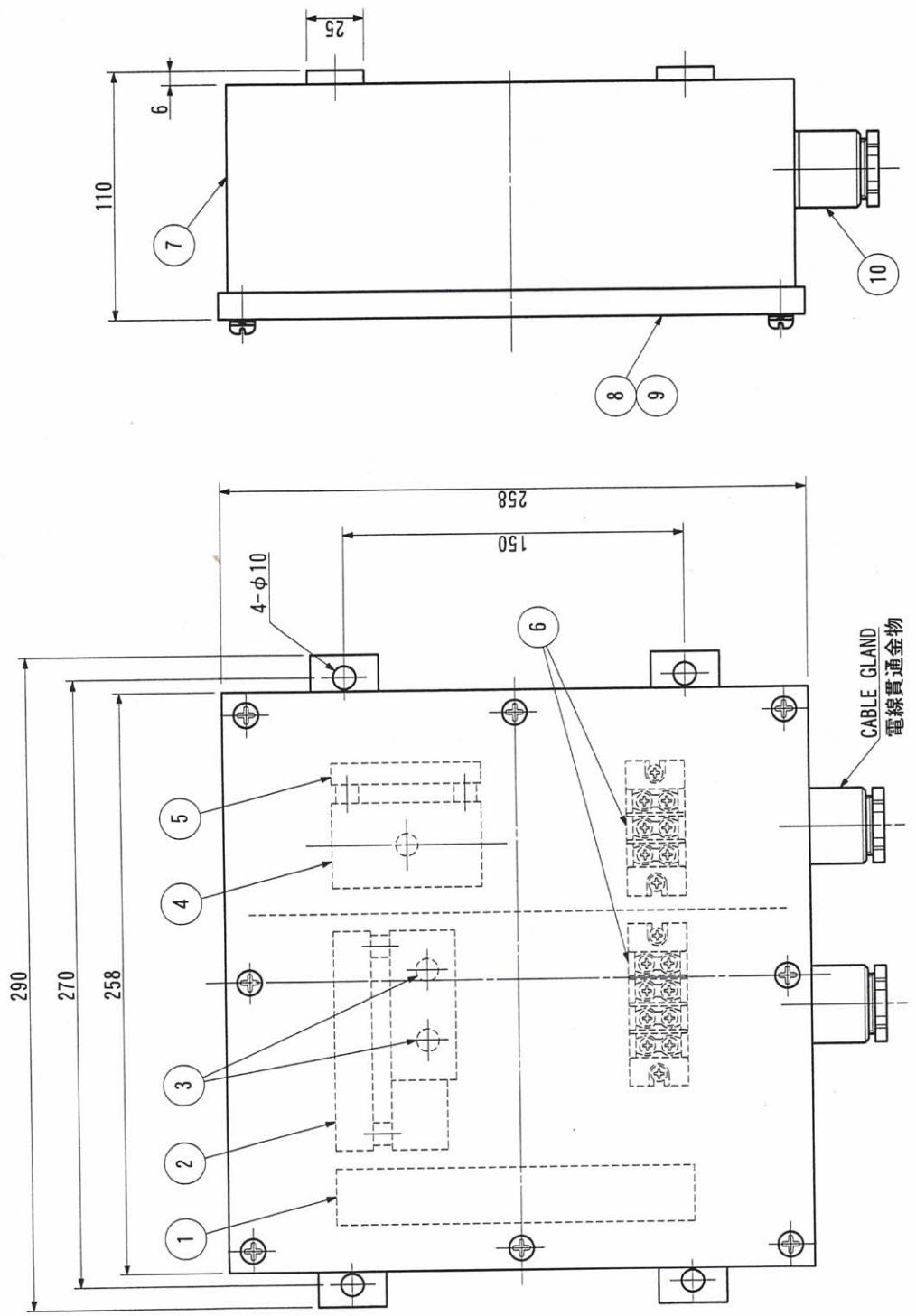


IBUKI KOGYO CO.,LTD. 伊吹工業株式会社	E150 MAGNET HORN HORN UNIT マグネットホーン ホーンユニット	CONSTRUCTION VIEW 構造図	D. W. N. C. K. D. DATE SCALE DWG. NO.	M. Kawamura Y. Ueda AUG. -9- 2001 1/6 SSJ-8710A



IBUKI KOGYO CO.,LTD. 伊吹工業株式会社		E150 MAGNET HORN OSCILLATOR UNIT マグネットホーン オシレータユニット	WALL MOUNT TYPE 壁掛形	D. W. N. M. Kawamura
			OUTLINE VIEW 外 形 図	C. K. D. Y. Ueda
			DATE AUG.-9.2001	DATE AUG.-9.2001
			SCALE 1/3	SCALE 1/3
			REMARKS DWG. NO SJ-8710B	REMARKS DWG. NO SJ-8710B
			PROTECTION GRADE 保護等級 MASS 質量	IP 44 4.8kg





IBUKI KOGYO CO.,LTD. 伊吹工業株式会社		E150 MAGNET HORN OSCILLATOR UNIT マグネットホーン オシレータユニット	WALL MOUNT TYPE 壁掛形	M. Kawamura C. K. D.	D. W. N. C. K. D.
		CONSTRUCTION VIEW 構造図		Y. Ueda	DATE AUG.-9-2001
				SCALE 1/3	SCALE 1/3
REMARKS	DATE	REV.	REMARKS	DATE	DWG. NO.
SSJ-8710B					

SYSTEM DIAGRAM
系統図

D.W.N.	K.M.	DATE	MAY -9. 2002
C.K.D.		DWG.NO.	SWJ-14-1/2725
IBUKI KOGYO CO., LTD.			OSAKA JAPAN

