

EC.....EE	EC.....EEX	EC.....EEXH	WIDTH (L)	HEIGHT (H)	DEPTH (P)	CAM LOCK NO.	HINGES NO.	PLATE WIDTH	PLATE HEIGHT
EC020315EE	EC020315EEX	EC020315EEXH	200	0300	150	1	2	150	250
EC023151EE	EC023151EEX	EC023151EEXH	250	0300	150	1	2	200	250
EC030315EE	EC030315EEX	EC030315EEXH	300	0300	150	1	2	250	250
EC030320EE	EC030320EEX	EC030320EEXH	300	0300	200	1	2	250	250
EC030415EE	EC030415EEX	EC030415EEXH	300	0400	150	1	2	250	350
EC030420EE	EC030420EEX	EC030420EEXH	300	0400	200	1	2	250	350
EC030515EE	EC030515EEX	EC030515EEXH	300	0500	150	1	2	250	450
EC030520EE	EC030520EEX	EC030520EEXH	300	0500	200	1	2	250	450
EC040315EE	EC040315EEX	EC040315EEXH	400	0300	150	1	2	350	250
EC040320EE	EC040320EEX	EC040320EEXH	400	0300	200	1	2	350	250
EC040420EE	EC040420EEX	EC040420EEXH	400	0400	200	1	2	350	350
EC040515EE	EC040515EEX	EC040515EEXH	400	0500	150	1	2	350	450
EC040520EE	EC040520EEX	EC040520EEXH	400	0500	200	1	2	350	450
EC040525EE	EC040525EEX	EC040525EEXH	400	0500	250	1	2	350	450
EC040620EE	EC040620EEX	EC040620EEXH	400	0600	200	2	2	350	550
EC040625EE	EC040625EEX	EC040625EEXH	400	0600	250	2	2	350	550
EC040630EE	EC040630EEX	EC040630EEXH	400	0600	300	2	2	350	550
EC040635EE	EC040635EEX	EC040635EEXH	400	0600	350	2	2	350	550
EC040640EE	EC040640EEX	EC040640EEXH	400	0600	400	2	2	350	550
EC050520EE	EC050520EEX	EC050520EEXH	500	0500	200	2	2	450	450
EC050525EE	EC050525EEX	EC050525EEXH	500	0500	250	2	2	450	450
EC050530EE	EC050530EEX	EC050530EEXH	500	0500	300	2	2	450	450
EC050615EE	EC050615EEX	EC050615EEXH	500	0600	150	2	2	450	550
EC050720EE	EC050720EEX	EC050720EEXH	500	0700	200	2	3	450	650
EC050725EE	EC050725EEX	EC050725EEXH	500	0700	250	2	3	450	650
EC060420EE	EC060420EEX	EC060420EEXH	600	0400	200	3	2	550	350
EC060430EE	EC060430EEX	EC060430EEXH	600	0400	300	3	2	550	350
EC060620EE	EC060620EEX	EC060620EEXH	600	0600	200	3	2	550	550
EC060625EE	EC060625EEX	EC060625EEXH	600	0600	250	3	2	550	550
EC060630EE	EC060630EEX	EC060630EEXH	600	0600	300	3	2	550	550
EC060635EE	EC060635EEX	EC060635EEXH	600	0600	350	3	2	550	550
EC060640EE	EC060640EEX	EC060640EEXH	600	0600	400	3	2	550	550
EC060820EE	EC060820EEX	EC060820EEXH	600	0800	200	4	3	550	750
EC060825EE	EC060825EEX	EC060825EEXH	600	0800	250	4	3	550	750
EC060830EE	EC060830EEX	EC060830EEXH	600	0800	300	4	3	550	750
EC060835EE	EC060835EEX	EC060835EEXH	600	0800	350	4	3	550	750
EC060840EE	EC060840EEX	EC060840EEXH	600	0800	400	4	3	550	750
EC061025EE	EC061025EEX	EC061025EEXH	600	1000	250	4	3	550	950
EC061030EE	EC061030EEX	EC061030EEXH	600	1000	300	4	3	550	950
EC061035EE	EC061035EEX	EC061035EEXH	600	1000	350	4	3	550	

PURPOSE	Instructions for the safe use of EC series boxes installed in potentially explosive environments		
GENERAL DESCRIPTION AND APPLICATION	These boxes, made by E.T.A. in stainless steel and painted low carbon steel, are compliant with European Directive 2014/34/EU, which aims to ensure the free movement of the products in question within EU countries, and applies to the protection systems and equipment intended for use in potentially explosive atmospheres (ATEX) due to the presence of flammable substances in the form of gases, vapours, mists or dusts. They are also compliant with the IECEx scheme for international explosive applications. The EC boxes are enclosures classified as: category 2 for gas and dust (zones 1, 21; redundancy for zones 2, 22) GED, Ex Ib and Ex Ib protection method according to:		
	<table border="0"> <tr> <td style="vertical-align: top;"> IEC STANDARD IEC 60079-0:2017 IEC 60079-7:2015/Amd. 1:2017 IEC 60079-31:2022 </td><td style="vertical-align: top;"> EN STANDARD EN IEC 60079-0:2018 EN 60079-7:2015 - EN IEC 60079-7:2015/A1:2018 EN 60079-31:2014 </td></tr> </table> The Ex-ib and Ex Ib protection methods are based on the concept of prevention: in order to be valid, the directive requires a high level of construction technology and certain characteristics for the enclosures and components, and requires periodic process checks to be carried out on ISO/IEC 9009-34:2018 and ISO 9001:2015 type approved products.	IEC STANDARD IEC 60079-0:2017 IEC 60079-7:2015/Amd. 1:2017 IEC 60079-31:2022	EN STANDARD EN IEC 60079-0:2018 EN 60079-7:2015 - EN IEC 60079-7:2015/A1:2018 EN 60079-31:2014
IEC STANDARD IEC 60079-0:2017 IEC 60079-7:2015/Amd. 1:2017 IEC 60079-31:2022	EN STANDARD EN IEC 60079-0:2018 EN 60079-7:2015 - EN IEC 60079-7:2015/A1:2018 EN 60079-31:2014		
NOMENCLATURE AND NOMINAL DIMENSIONS	Enclosure code: EC; Dimensions= AA [dm], BB [dm], PP [dm]; EE= letters indicating painted low carbon steel; EEH= letters indicating stainless steel 304L; EEHH= letters indicating stainless steel AISI316L E.g. EC.....EE - ECAABBPPEE - EC030420EE EC.....EEH - AABBPPEEX - EC030420EEH EC.....EEHH - ECORAABBPPEEX - EC030420EEHH		
TECHNICAL FEATURES	EC.....EE: enclosure and cover made from low carbon DC01 sheet steel, painted with thermosetting powders; EC.....EEH: enclosure and cover made from AISI 304L stainless steel; EC.....EEHH: Enclosure and cover made from AISI 316L stainless steel; Door with silicone gasket, locking system with ¼ turn box in stainless steel. The number of closures and hinges varies with the dimensions (FIG. 1-2-3-4-5-6). Wall mounting system using brackets to be assembled. Galvanized plate. Pack of screws for plate fixing and for earthing fixing. The boxes can also be painted with a thickness of <200 µm. Drilling can be done by respecting the indications in FIG. 7.		
PLATE DATA	The plate on the inside of the door contains the manufacturer's information, the product's identification, the information of the notified body which issues the certificate, the certificate numbers and the category/zone and types of protection:		
	II 2D Ex Ib EC Gb II 2D Ex Ib IIC Gb IMQ 09 ATEX 037 U IECEx IMQ 17.0014 U		

SUMMARY OF THE INFORMATION FOR ATEX

ATEX CERTIFICATE NO. EC04D302EEHX type 1, 12, 3R, 4X IP66

ETAs E.T.A. S.p.A. via Monte Bergamasco 8 - 22091 Costa CO Italy
0304.94.41 - 0306011 - 0306012 and 0306017 certified system

EN60528 EN60528 C U L US LISTED homologated

Industrial control gear
EUR ENEC
Issue n° 0000069

ATEX EX

The CE mark is present on the plate, being a component, it's not related to the ATEX directive.

DOCUMENT RELATED TO THE ATEX

INSTRUCTION FOR USE N. 99.073

REV. 1 del 01.01.2023

ACCESSORIES AND EARTH CONNECTION	The enclosures are equipped with an external stud for the earthing connection FIG.8 : the stud is either through-mounted or welded. A door stop can be mounted on the enclosures.	
	The enclosures can be mounted on the wall using the living kit sold separately (holes to be drilled on the casing). The holes on the painted enclosures must be closed with special screws with silicone OR + nuts FIG.9	
OPERATING TEMPERATURE	T min = - 60° C T max = + 130° C	
MAX SURFACE TEMPERATURE	The dissipation values for determining the surface T, compared to the maximum ambient temperature (ref. CEI 17-43; IEC/TR 60890-2022) are available upon request.	
PROTECTION RATING	IP66, IK10 in accordance with: IEC STANDARD IEC 62208:2011 IEC 60529:1989/Amd.2:2013 IEC 62262:2002	EN STANDARD EN 62208:2011 EN 60529:1991/A2:2013 EN 62262:2002/A1:2021
LIMITATIONS OF USE/INSTALLATION	If components and accessories are installed inside the "U" enclosure, the entire unit must be subjected to separate certification as a junction box or control panel; Components and accessories must be installed in such a way that the surface and air distances between the components and the adjacent accessories, walls, and enclosure cover respect those prescribed by EN/IEC 60079-7 in relation to the equipment's rated voltage; FIG.7 shows the typical drilling with the minimum distances that must be guaranteed; The coated enclosures must be installed in such a way as to minimise the risk of electrostatic discharges in the presence of potentially explosive atmospheres due to the presence of dusts; The use of certified category 2G, 2D or 2GD cable glands and accessories, which have a suitable EPL Gb Db protection method and ensure a protection rating of IP66, must be guaranteed.	
FIG.1	All the measurements shown in the table are expressed in millimetres	

FIG.1

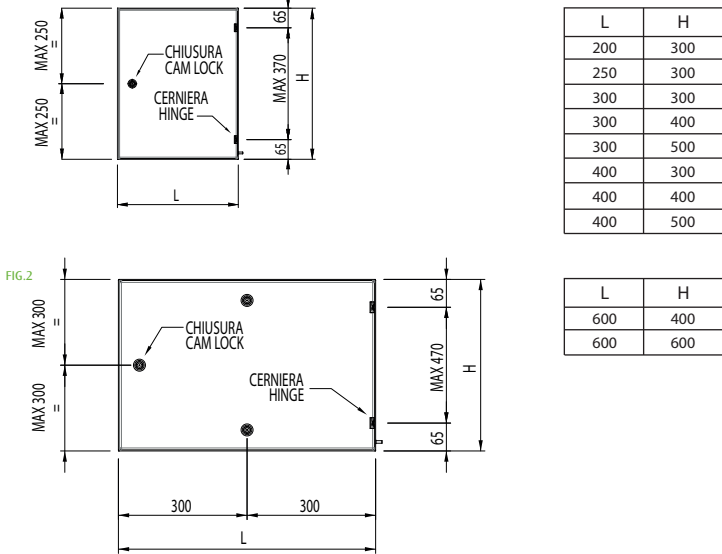


FIG.8

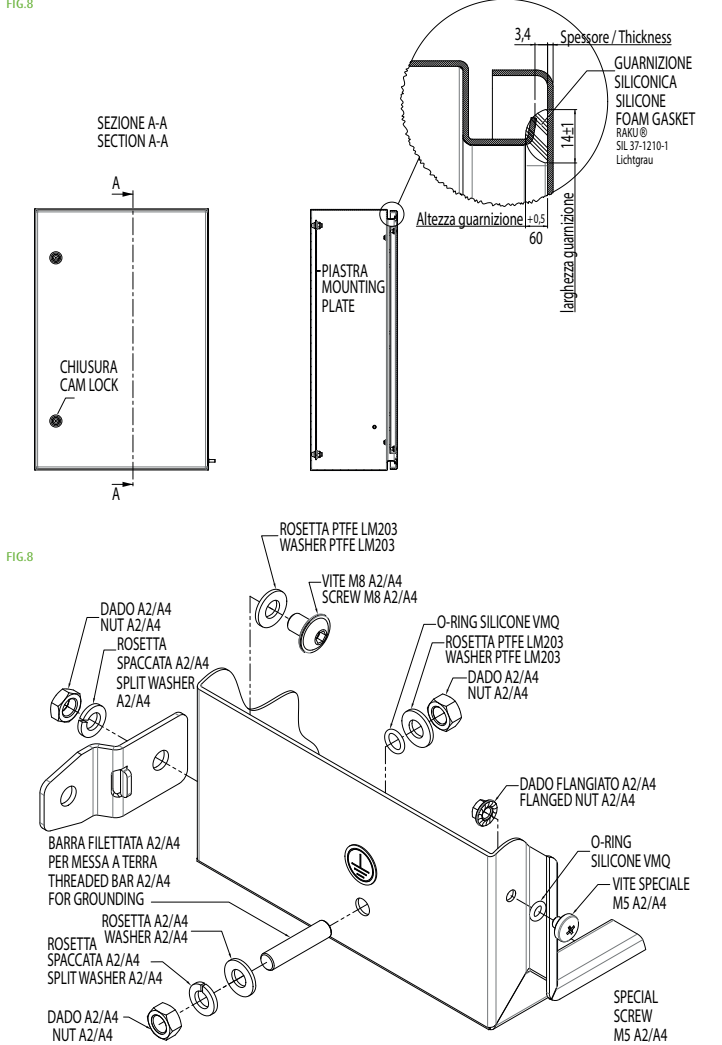


FIG.3

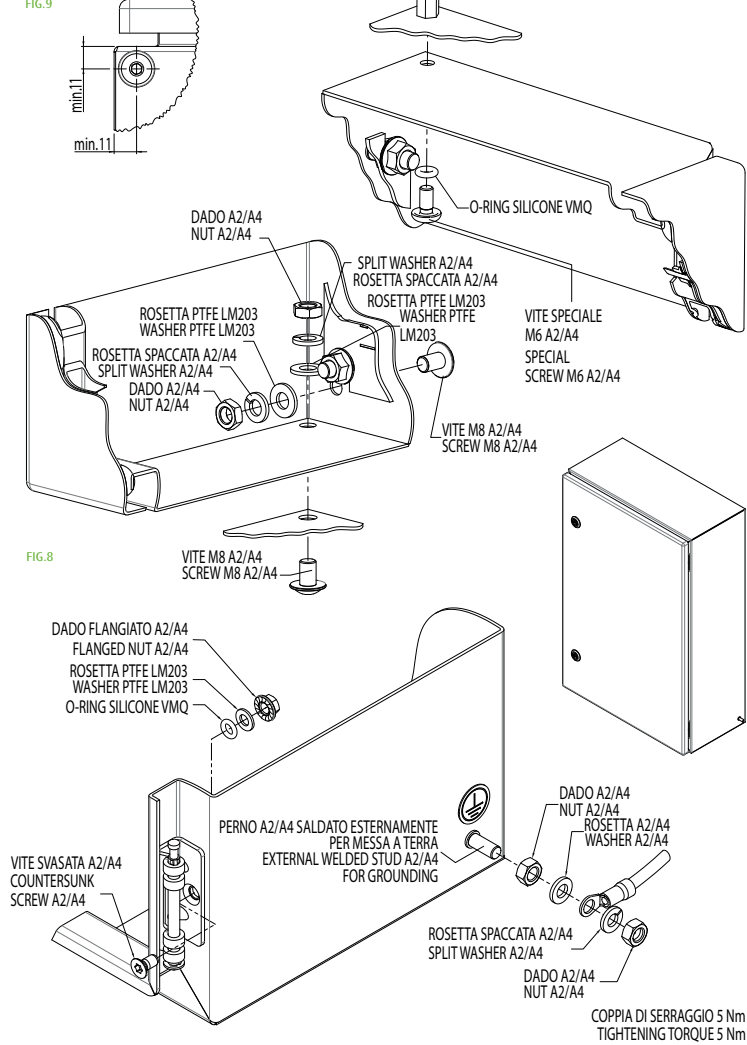
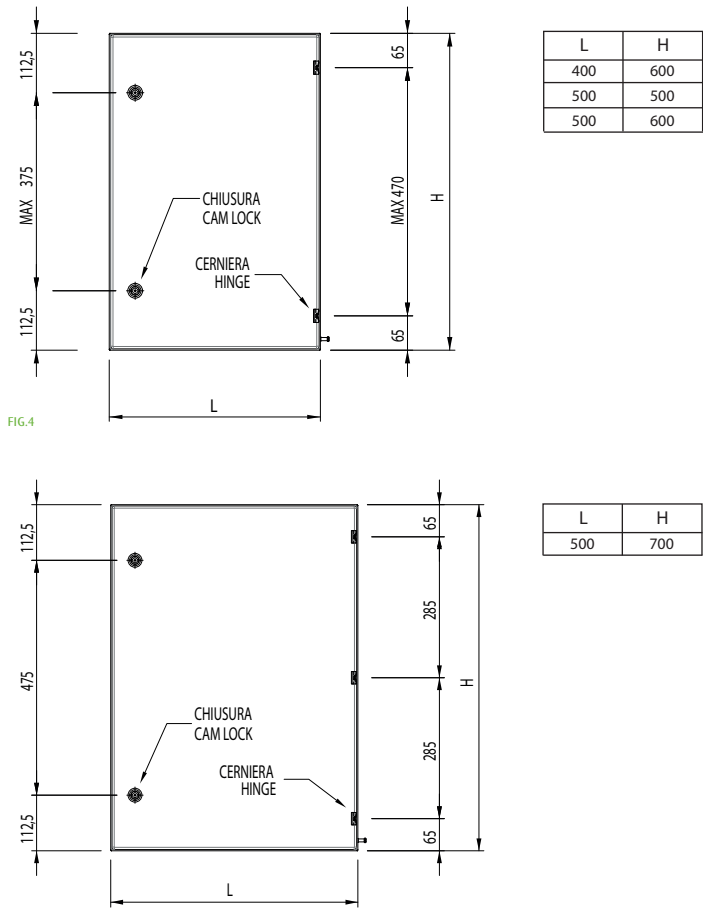
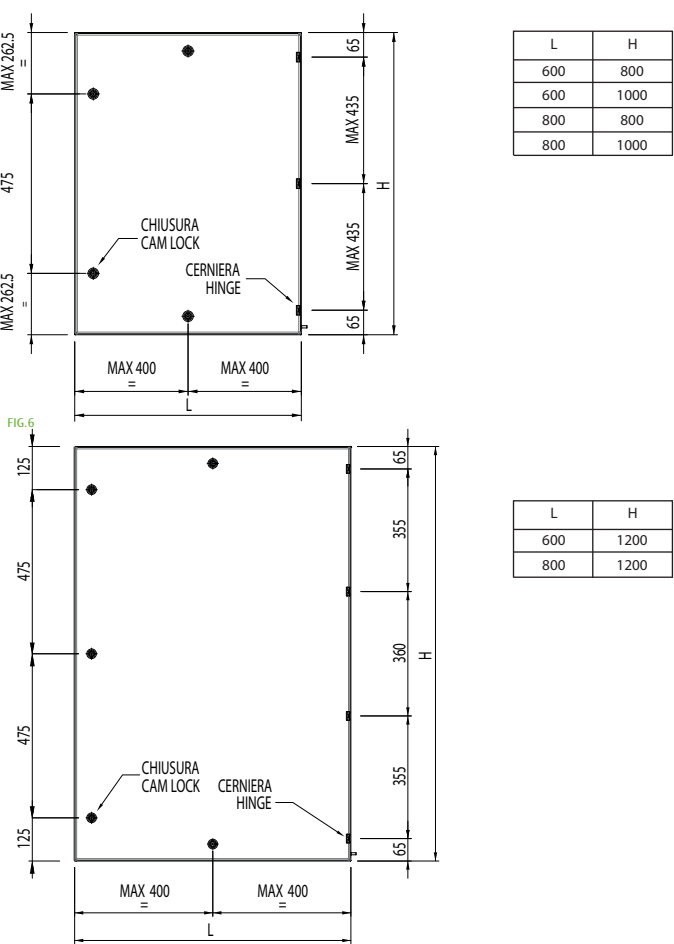
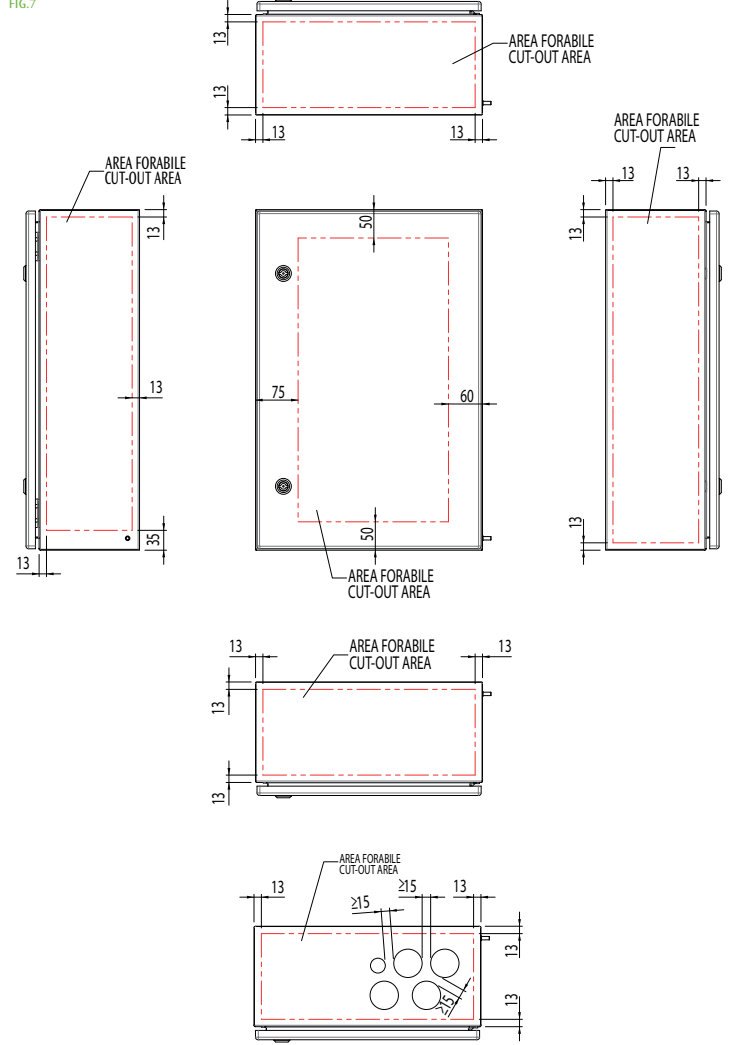


FIG.5



All the measurements shown in the table are expressed in millimetres.

FIG.7



EC.....EE	EC.....EFX	EC.....EBX	WIDTH (L)	HEIGHT (H)	DEPTH (P)	CAM LOCK NO.	HINGES NO.	PLATE WIDTH	PLATE HEIGHT
EC020315EE	EC020315EX	EC020315EXH	200	0300	150	1	2	150	250
EC020315EE	EC020315EX	EC020315EXH	250	0300	150	1	2	200	250
EC030315EE	EC030315EX	EC030315EXH	300	0300	150	1	2	250	250
EC030320EE	EC030320EX	EC030320EXH	300	0300	200	1	2	250	250
EC030415EE	EC030415EX	EC030415EXH	300	0400	150	1	2	250	350
EC030420EE	EC030420EX	EC030420EXH	300	0400	200	1	2	250	350
EC030515EE	EC030515EX	EC030515EXH	300	0500	150	1	2	250	450
EC030520EE	EC030520EX	EC030520EXH	300	0500	200	1	2	250	450
EC040315EE	EC040315EX	EC040315EXH	400	0300	150	1	2	350	250
EC040320EE	EC040320EX	EC040320EXH	400	0300	200	1	2	350	250
EC040420EE	EC040420EX	EC040420EXH	400	0400	200	1	2	350	350
EC040515EE	EC040515EX	EC040515EXH	400	0500	150	1	2	350	450
EC040520EE	EC040520EX	EC040520EXH	400	0500	200	1	2	350	450
EC040525EE	EC040525EX	EC040525EXH	400	0500	250	1	2	350	450
EC040620EE	EC040620EX	EC040620EXH	400	0600	200	2	2	350	550
EC040625EE	EC040625EX	EC040625EXH	400	0600	250	2	2	350	550
EC040630EE	EC040630EX	EC040630EXH	400	0600	300	2	2	350	550
EC040635EE	EC040635EX	EC040635EXH	400	0600	350	2	2	350	550
EC040640EE	EC040640EX	EC040640EXH	400	0600	400	2	2	350	550
EC050520EE	EC050520EX	EC050520EXH	500	0500	200	2	2	450	450
EC050525EE	EC050525EX	EC050525EXH	500	0500	250	2	2	450	450
EC050530EE	EC050530EX	EC050530EXH	500	0500	300	2	2	450	450
EC050615EE	EC050615EX	EC050615EXH	500	0500	150	2	2	450	550
EC050720EE	EC050720EX	EC050720EXH	500	0700	200	2	3	450	650
EC050725EE	EC050725EX	EC050725EXH	500	0700	250	2	3	450	650
EC060420EE	EC060420EX	EC060420EXH	600	0400	200	3	2	550	350
EC060430EE	EC060430EX	EC060430EXH	600	0400	300	3	2	550	350
EC060620EE	EC060620EX	EC060620EXH	600	0600	200	3	2	550	550
EC060625EE	EC060625EX	EC060625EXH	600	0600	250	3	2	550	550
EC060630EE	EC060630EX	EC060630EXH	600	0600	300	3	2	550	550
EC060635EE	EC060635EX	EC060635EXH	600	0600	350	3	2	550	550
EC060640EE	EC060640EX	EC060640EXH	600	0600	400	3	2	550	550
EC060820EE	EC060820EX	EC060820EXH	600	0800	200	4	3	550	750
EC060825EE	EC060825EX	EC060825EXH	600	0800	250	4	3	550	750
EC060830EE	EC060830EX	EC060830EXH	600	0800	300	4	3	550	750
EC060835EE	EC060835EX	EC060835EXH	600	0800	350	4	3	550	750
EC060840EE	EC060840EX	EC060840EXH	600	0800	400	4	3	550	750
EC061025EE	EC061025EX	EC061025EXH	600	1000	250	4	3	550	950
EC061030EE	EC061030EX	EC061030EXH	600	1000	300	4	3	550	950
EC061035EE	EC061035EX	EC061035EXH	600	1000	350	4	3	550	950
EC061040EE	EC061040EX	EC061040EXH	600	1000	400	4	3	550	950
EC061230EE	EC061230EX	EC061230EXH	600	1200	300	5	4	550	1150
EC080830EE	EC080830EX	EC080830EXH	800	0800	300	4	3	750	750
EC080840EE	EC080840EX	EC080840EXH	800	0800	400	4	3	750	750
EC081025EE	EC081025EX	EC081025EXH	800	1000	250	4	3	750	950
EC081030EE	EC081030EX	EC081030EXH	800	1000	300	4	3	750	950
EC081040EE	EC081040EX	EC081040EXH	800	1000	400	4	3	750	950
EC081230EE	EC081230EX	EC081230EXH	800	1200	300	5	4	750	1150
EC081240EE	EC081240EX	EC081240EXH	800	1200	400	5	4	750	1150