



04584819

Edition 8

November 2014

Air Impact Wrench

231C, 231H and 244A Series

Product Information

EN Product Information

ES Especificaciones del producto

FR Spécifications du produit

IT Specifiche prodotto

DE Technische Produktdaten

NL Productspecificaties

DA Produktspecifikationer

SV Produktspecifikationer

NO Produktspesifikasjoner

FI Tuote-erittely

PT Especificações do Produto

EL Προδιαγραφές προϊόντος

SL Specifikacije izdelka

SK Špecifikácie produktu

CS Specifikace výrobku

ET Toote spetsifikatsioon

HU A termék jellemzői

LT Gaminio techniniai duomenys

LV Ierices specifikācijas

PL Informacje o Produkcie

BG Информация за Продукта

RO Informații Privind Produsul

RU Технические характеристики изделия

ZH 产品信息

JA 製品仕様

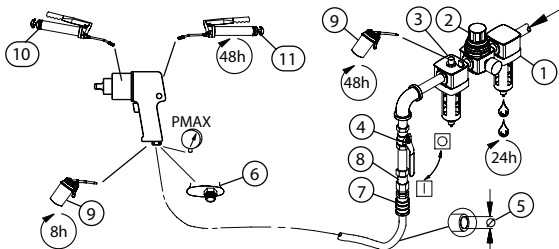
KO 제품 상세

HR Podaci o proizvodu



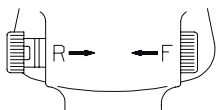
Save These Instructions

IR Ingersoll Rand®

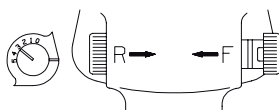


(Dwg. 47132600)

① ② ③		⑤	⑥	⑦	⑨	⑨	⑩		
IR # - NPT	IR # - BS	inch (mm)	NPT	IR #	IR #	IR #	cm ³	IR #	cm ³
C38341-810	C383D1-810	3/8 (10)	1/4	MSCF33	10	105-11b	4	105-11b	4



(Dwg.TPD1248)



(Dwg.TPD1249)

Product Safety Information

Intended Use:

These Air Impact Wrenches are designed to remove and install threaded fasteners.

For additional information refer to Product Safety Information Manual Form 04580916.

Manuals can be downloaded from ingersollrandproducts.com

Power Management System

For models that include a power management system, the system allows operator reduction of maximum output power in either the forward or the reverse direction.

For reduced power in the forward direction and full power in the reverse direction, push the reverse valve inward on the right side of the tool and rotate the reverse valve until the notch on the right side aligns with the desired number on the right side. This provides reduced power in forward but full power in reverse when the reverse valve is pushed in the opposite direction. (See TPD1248 on page 2.)

For reduced power in the reverse direction and full power in the forward direction, push the reverse valve inward on the left side of the tool and rotate the reverse valve until the notch on the left side aligns with the desired number on the left side. This provides full power in forward but reduced power in reverse when the reverse valve is pushed the opposite direction. (See TPD1249 on page 2.)

For full power in both directions, rotate the Reverse Valve until the notch on either end of the Reverse Valve aligns with 5 on each side of the housing.

The power level indicators (See TPD1248 and TPD 1249) are for reference and **DO NOT** indicate a specific power. The power output can be further reduced in forward or reverse by using the variable throttle.

Product Specifications

Model	Style	Drive		Impacts per min.	Recommended Torque Range ft-lb (Nm)	
		Type	Size		Forward	Reverse
231C	Pistol	Square	1/2"	1,200	25-300 (34-407)	25-350 (34-475)
231C-AP	Pistol	Square	1/2"	1,200	25-300 (34-407)	25-350 (34-475)
231HA	Pistol	Square	1/2"	1,150	25-300 (34-407)	25-350 (34-475)
231HA-2	Pistol	Square 2" extended	1/2"	1,150	25-300 (34-407)	25-350 (34-475)
244A	Pistol	Square	1/2"	1,300	40-350 (54-475)	40-350 (54-475)
244A-2	Pistol	Square 2" extended	1/2"	1,300	40-350 (54-475)	40-350 (54-475)

Model	Sound Level dB(A) (ISO15744)		Vibration (m/s ²) (ISO28927)	
	† Pressure (L _p)	‡ Power (L _w)	Level	*K
231C	99	110	6.5	0.8
231C-AP	99	110	6.5	0.8
231HA	94	105	6.5	0.8
231HA-2	94	105	6.5	0.8
244A	93	104	8.7	0.8
244A-2	93	104	8.6	1.1

† K_{PA} = 3dB measurement uncertainty

‡ K_{WA} = 3dB measurement uncertainty

* K = Vibration measurement uncertainty

WARNING

Sound and vibration values were measured in compliance with internationally recognized test standards. The exposure to the user in a specific tool application may vary from these results. Therefore, on site measurements should be used to determine the hazard level in that specific application.

Installation and Lubrication

Size air supply line to ensure tool's maximum operating pressure (P_{MAX}) at tool inlet. Drain condensate from valve(s) at low point(s) of piping, air filter and compressor tank daily. Install a properly sized Safety Air Fuse upstream of hose and use an anti-whip device across any hose coupling without internal shut-off, to prevent hose whipping if a hose fails or coupling disconnects. See drawing 47132600 and table on page 2. Maintenance frequency is shown in a circular arrow and defined as h=hours, d=days, and m=months of actual use. Items identified as:

- | | |
|-----------------------------|------------------------------|
| 1. Air filter | 7. Coupling |
| 2. Regulator | 8. Safety Air Fuse |
| 3. Lubricator | 9. Oil |
| 4. Emergency shut-off valve | 10. Grease - during assembly |
| 5. Hose diameter | 11. Grease - through fitting |
| 6. Thread size | |

Parts and Maintenance

When the life of the tool has expired, it is recommended that the tool be disassembled, degreased and parts be separated by material so that they can be recycled.

Original instructions are in English. Other languages are a translation of the original instructions.

Tool repair and maintenance should only be carried out by an authorized Service Center.

Refer all communications to the nearest **Ingersoll Rand** Office or Distributor.

DECLARATION OF CONFORMITY



(ES) DECLARACIÓN DE CONFORMIDAD **(FR)** CERTIFICAT DE CONFORMITÉ **(IT)** DICHIARAZIONE DI CONFORMITÀ **(DE)** KONFORMITÄTSERKLÄRUNG **(NL)** SCHRIFTELIJKE VERKLARING VAN CONFORMITEIT **(DA)** FABRIKATIONSERKLÆRING **(SV)** FÖRSÄKRAN OM ÖVERENSSTÄMMELSE **(NO)** KONFORMITETSERKLÆRING **(FI)** VAKUUTUSNORMIEN TÄYTTÄMISESTÄ **(PT)** DECLARAÇÃO DE CONFORMIDADE **(EL)** ΔΗΛΩΣΗ ΑΝΑΓΝΩΡΙΣΗΣ

Ingersoll Rand

Lakeview Dr, IE Swords

Name and address of the person authorized to compile the technical file: Jouko Peussa / Lakeview Dr, IE Swords

(ES) nombre y dirección de la persona facultada para elaborar el expediente técnico **(FR)** Nom et adresse de la personne autorisée à constituer le dossier technique **(IT)** nome e indirizzo della persona autorizzata a costituire il fascicolo tecnico **(DE)** Name und Anschrift der Person, die bevollmächtigt ist, die technischen Unterlagen zusammenzustellen **(NL)** naam en adres van degene die gemachtigd is het technisch dossier samen te stellen **(DA)** navn og adresse på den person, der har bemyndigelse til at udarbejde det tekniske dossier **(SV)** Namn på och adress till den person som är behörig att ställa samman den tekniska dokumentationen **(NO)** navn og adresse på personen som er autorisert til å kompilere den tekniske dokumentasjonen **(FI)** sen henkilöön nimi ja osoite, joka on valtuutettu kokoamaan teknisen eritelmän **(PT)** Nome e endereço da pessoa autorizada a compilar o processo técnico **(EL)** ηο όνομα και ηη διεύθυνση ηο πποζώπος ηος εξορζιοδοηόμενος να καθαρηζει ηην ηεσνικό θάκελο

Declare under our sole responsibility that the product: Air Impact Wrench

(ES) Declaramos que, bajo nuestra responsabilidad exclusiva, el producto: **(FR)** Déclarons sous notre seule responsabilité que le produit: **(IT)** Dichiariamo sotto la nostra unica responsabilità che il prodotto: **(DE)** Erklären hiermit, gemäß unserer alleinigen Verantwortung, daß die Geräte: **(NL)** Verklaren, onder onze uitsluitende aansprakelijkheid, dat het product: **(DA)** Erklærer som eneansvarlig, at nedenstående produkt: **(SV)** Intygar härmed, i enlighet med vårt fullständiga ansvar, att produkten: **(NO)** Erklærer som eneansvarlig at produktet: **(FI)** Vakuutamme ja kannamme yksin täyden vastuun siitä, että tuote: **(PT)** Declaramos sob a nossa exclusiva responsabilidade que o produto: **(EL)** Δηλώνουμε ότι με δική μας ευθύνη το προϊόν:

Model: 231C, 231H, 244A Series / Serial Number Range: SR10A → XXXXX

(ES) Modelo: / Gama de No. de Serie: **(FR)** Modèle: / No. Serie: **(IT)** Modello: / Numeri di Serie: **(DE)** Modell: / Serien-Nr.-Bereich: **(NL)** Model: / Seriennummers: **(DA)** Model: / Serien: **(SV)** Modell: / Seriennummer, mellan: **(NO)** Modell: / Serien: **(FI)** Mallia: / Sarjanumero: **(PT)** Modelo: / Gama de Nos de Série: **(EL)** Μοηηλα: / Κλίμαχα Αύξοντος Αριθμού:

To which this declaration relates, is in compliance with provisions of Directive(s): 2006/42/EC (Machinery)

(ES) a los que se refiere la presente declaración, cumplen con todo lo establecido en las directivas: **(FR)** objet de ce certificat, est conforme aux prescriptions des Directives: **(IT)** a cui si riferisce la presente dichiarazione è conforme alle normative delle direttive: **(DE)** auf die sich diese Erklärung bezieht, den Richtlinien: **(NL)** waarop deze verklaring betrekking heeft overeenkomst met de bepalingen van directieven: **(DA)** som denne erklæring vedrører, overholder bestemmelserne i følgende direktiver: **(SV)** som detta intyg avser, uppfyller kraven i Direktiven: **(NO)** som denne erklæringen gjelder for, oppfyller bestemmelsene i EU-d irektivene: **(FI)** johon tämä vakuutus viittaa, täyttää direktiiveissä: **(PT)** ao qual se refere a presente declaração, está de acordo com as prescrições das Directivas: **(EL)** τα οποία αφορά αυτή η δήλωση, είναι σύμφωνα με τις προβλέψεις των Εντολών:

By using the following Principle Standards: EN ISO 28927-2, EN ISO15744, EN ISO 11148-6

(ES) conforme a los siguientes estándares: **(FR)** en observant les normes de principe suivantes: **(IT)** secondo i seguenti standard: **(DE)** unter Anlehnung an die folgenden Grundnormen entsprechen: **(NL)** overeenkomstig de volgende hoofdstandaards: **(DA)** ved at være i overensstemmelse med følgende hovedstandard(er): **(SV)** Genom att använda följande principstandard: **(NO)** ved å bruke følgende prinsipielle standarder: **(FI)** esitetty vaatimukset seuraavia perusnormeja käytettäessä: **(PT)** observando as seguintes Normas Principais: **(EL)** Χρησιμοποιώντας ια παρακάτω κύρια πρότυπα:

Date / Place: November, 2014 / IE Swords

(ES) Fecha / Lugar: Noviembre, 2014 / IE Swords **(FR)** Date / Lieu: Novembre, 2014 / IE Swords **(IT)** Data / Posto: Novembre, 2014 / IE Swords **(DE)** Datum / Ort: November, 2014 / IE Swords **(NL)** Datum / Plaats: November, 2014 / IE Swords **(DA)** Dato / Place: November, 2014 / IE Swords **(SV)** Datum / Plats: November, 2014 / IE Swords **(NO)** Dato / Sted: November, 2014 / IE Swords **(FI)** Päiväys / Paikka: Marraskuu, 2014 / IE Swords **(PT)** Data / Lugar: Novembro, 2014 / IE Swords **(EL)** Ημερομηνία / θέση: Νοέμβριος, 2014 / IE Swords:

Approved By:

(ES) Aprobado por: **(IT)** Approvato da: **(FR)** Approuvé par: **(DE)** Genehmigt von: **(NL)** Goedgekeurd door: **(DA)** Godkendt af: **(SV)** Godkänt av: **(NO)** Godkjent av: **(FI)** Hyväksytty: **(PT)** Aprovado por: **(EL)** Εγκρίθηκε από:


Jouko Peussa

Engineering Director, ESA



Patrick S. Livingston

Engineering Manager, Vehicle & Industrial Tools

DECLARATION OF CONFORMITY



(SL) IZJAVA O SKLADNOSTI (SK) PREHLÁSENIE O ZHODE (CS) PROHLÁŠENÍ O SHODĚ (ET) VASTAVUS-DEKLARATSIOON (HU) MEGFELELŐSÉGI NYILATKOZAT (LT) ATITIKTIES PAREIŠKIMAS (LV) ATBILSTĪBAS DEKLARĀCIJA (PL) DEKLARACJA ZGODNOŚCI (BG) ДЕКЛАРАЦИЯ ЗА СЪОТВЕТСТВИЕ (RO) DECLARAȚIE DE CONFORMITATE (HR) IZJAVA O SUKLADNOSTI

Ingersoll Rand

Lakeview Dr, IE Swords

Name and address of the person authorized to compile the technical file: **Jouko Peussa / Lakeview Dr, IE Swords**

(SL) ime in naslov osebe, pooblaščenca za sestavljanje tehnične dokumentacije (SK) meno a adresu osoby oprávnenej na zostavenie súboru technickej dokumentácie (CS) jméno a adresu osoby pověřené sestavením technické dokumentace (ET) selle ühenduses registrisse kantud isiku nimi ja address (HU) a műszaki dokumentáció összeállítására felhatalmazott személy (LT) asmens, įgalioto sudaryti atitinkamą techninę bylą (LV) tās personas vārds un adrese, kura pilnvarota sastādīt tehnisko (PL) nazwisko i adres osoby upoważnionej do przygotowania dokumentacji technicznej (BG) името и адреса на лицето,оторизирано да съставя техническото досие (RO) numele și adresa persoanei autorizate pentru întocmirea cărții tehnice (HR) Ime i adresa osobe ovlaštene za sastavljanje tehničke dokumentacije:

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(SL) Pod polno odgovornostjo izjavljamo, da se izdele: (SK) Prehlasujeme na svojo zupovednost', že produkt: (CS) Prohlasujeme na svou zodpovednost, že výrobek: (ET) Deklareerime oma ainuvastutusel, et toode: (HU) Kizárólagos felelősségünk tudatában kijelentjük, hogy a termék: (LT) Prisiimdam atsakomybę pareiškimui, kad gaminys: (LV) Uzņemoties pilnīgu atbildību, apliecinām, ka ražojums: (PL) Oświadczam, że ponosi pełną odpowiedzialność za to, że produkt: (BG) Декларираме на собствена отговорност, че продуктът: (RO) Declarăm sub propria răspundere că produsul: (HR) Izjavljujemo pod našom isključivom odgovornošću da je proizvod:

Model: 231C, 231H, 244A Series / Serial Number Range: SR10A → XXXXX

(SL) Model: / Območje serijskih števil: (SK) Model: / Výrobné číslo (CS) Model: / Výrobní číslo (ET) Mudel: / Seeri-
numbrite vahemik (HU) Modell: / Gyártási szám-tartomány (LT) Modeliai: / Serijos numeriai (LV) Modelis: / Sērijas
numuru diapazons (PL) Model: / O numerach seryjnych (BG) Модел: / Серийни номера от до: (RO) Model: / Domeniu
număr serie: (HR) Model/opseg serijskog broja:

To which this declaration relates, is in compliance with provisions of Directive(s): 2006/42/EC (Machinery)

(SL) Na katerega se ta izjava o skladnosti nanaša, sklada z določili smernic: (SK) Ku ktorému sa toto prehlásenie vzťahuje, zodpovedá ustanoveniam smerníc: (CS) Ke kterým se toto prohlášení vztahuje, odpovídají ustanovením směrníc: (ET) Mida käesolev deklaratsioon puudutab, on vastavuses järgmis(t)e direktiivi(de) säetega: (HU) Amelyekre ezen nyilatkozat vonatkozik, megfelelnek a következő irányelv(ek) előírásainak: (LT) Kuriems taikomas šis pareiškimas, atitinka šios direktyvos nuostatas: (LV) Uz kuru šī deklarācija attiecas, atbilst direktīvas(u) nosacījumiem: (PL) Do których ta deklaracja się odnosi, są zgodne z postanowieniami Dyrektywy (Dyrektyw): (BG) За който се отнася настоящата декларация, е в съответствие с разпоредбите на Директива (и): (RO) Produsul la care se referă declarația este conform cu prevederile Directivei(lor): (HR) Ono na što se ova izjava odnosi u skladnosti je s odredbama Direktive(a):

By using the following Principle Standards: EN ISO 28927-2, EN ISO15744, EN ISO 11148-6

(SL) Uporabljeni osnovni standardi: (SK) Použitím nasledujúcich zákonných noriem: (CS) Použitím následujících zákonných norem: (ET) Järgmistele põhistandardite kasutamise korral: (HU) A következő elvi szabványok alkalmazásával: (LT) Remiantis šiais pagrindiniais standartais: (LV) Izmantojot sekojošos galvenos standartus: (PL) Przy zastosowaniu następujących podstawowych norm: (BG) С използване на следните основни Стандарти: (RO) Utilizând următoarele standarde de principiu: (HR) Koristeći sljedeće glavne standarde:

Date / Place: November, 2014 / IE Swords

(SL) Datum / Kraj: november, 2014 / IE Swords: (SK) Dátum / Miesto: November, 2014 / IE Swords: (CS) Datum / místo: listopad, 2014 / IE Swords: (ET) Kuupäev / Koht: November, 2014 / IE Swords: (HU) Dátum / Hely: November, 2014 / IE Swords: (LT) Data / Vieta: Lapkritis, 2014 / IE Swords: (LV) Datums/ Vieta: Novembris, 2014 / IE Swords: (PL) Data / Miejsce: listopad, 2014 / IE Swords: (BG) Дата / място: ноември, 2014 / IE Swords: (RO) Data / Loc: noiembrie, 2014 / IE Swords: (HR) Datum / mjesto: studeni, 2014 / IE Swords

Approved By:

(SL) Odobril: (SK) Schválil: (CS) Schválil: (ET) Kinnitatud: (HU) Jóváhagyta: (LT) Patvirtinta: (LV) Apstiprināja: (PL) Zatwierdzone przez: (BG) Одобрен от: (RO) Aprobat de: (HR) Odobrio:

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