

**XQ** TIG

**ewm**<sup>®</sup>  
WE ARE WELDING

# TETRIX XQ 230, 300

**IT'S BEGINNING.**  
YOUR ALL-NEW TIG WELDING  
EXPERIENCE



MODULAR



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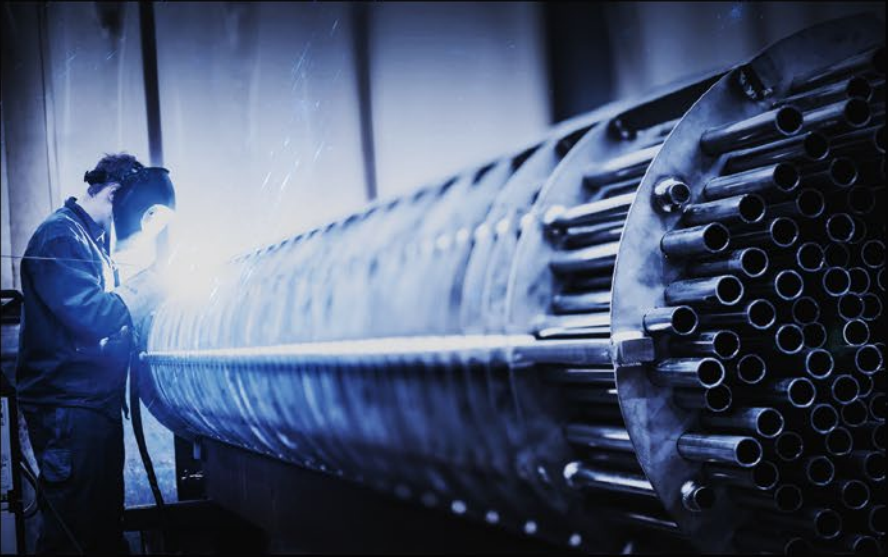
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**IT'S BEGINNING.**  
YOUR ALL-NEW  
WELDING EXPERIENCE.



MORE DIGITAL, UNIVERSAL AND PERSONAL –  
THE WELDING REVOLUTION IS HERE.  
SMART NETWORKING. ROBUST OPERATION.  
SOPHISTICATED CASING. REVOLUTIONARY  
CONTROL. AND UNBELIEVABLY POWERFUL,  
WITH CURRENT UP TO 230 A DIRECTLY  
FROM A SINGLE-PHASE 230-V SOCKET.  
THE **TETRIX XQ MACHINES** OFFER A WHOLE  
NEW TIG WELDING EXPERIENCE!  
FOR THE BEST WELDING RESULTS  
YOU'VE EVER ACHIEVED.



**MATERIALS** +

- Low-alloy steels
- High-alloy steels
- Aluminium and aluminium alloys
- Non-ferrous metals
- Titanium





# WHATEVER YOU'RE PLANNING.

## TETRIX XQ – ONE MACHINE FOR ALL YOUR NEEDS.

The new TIG machines from the TETRIX XQ series show their strengths in a broad range of applications and with the widest variety of materials. Whether you're welding manually or automatically, TETRIX XQ machines make life as easy as possible for you when carrying out assembly work, repairs or maintenance.



### SECTORS +

- Food industry
- Chemicals and pharmaceuticals industry
- Energy and water sector
- Aerospace industry
- Medical technology
- Pipeline and container construction
- Mechanical and plant engineering
- Paper industry
- Metalworking trades



# PERFECT SEAMS.

BECAUSE YOUR WELDING  
RESULTS ARE WHAT COUNTS.

TETRIX XQ welding machines have yet to meet their match in terms of quality and progressiveness. When it comes to the perfect weld seam, though, your talent, experience and abilities as a welder are put to the test. A TETRIX XQ machine supports you in your work like no other welding machine. A long duty cycle with welding currents up to 230 or 300 A from single-phase 230 or 380–400-V mains enable uninterrupted welding, even with weak power grids, long mains leads or when using a generator. Its perfectly tuned weight, size and power will make the TETRIX XQ your new favourite machine in any work environment.



## YOUR TETRIX XQ SUPPORTS YOU WITH THESE FUNCTIONS

### TIG +

#### **Pulsing**

Decreases the heat input, which reduces distortion and discolouration.

#### **activArc**

Dynamic TIG arc with automatic arc stabilisation. The high arc force provides reliable sidewall fusion as well as focused and uniform heat input. Particularly beneficial when welding fillet welds and root passes.

#### **Spotmatic**

Reproducible welding of uniform tack points.

#### **AC balling**

Ensures optimum tungsten balling and therefore a stable, easy-to-handle arc.

#### **AC special**

Ideal for joining metal sheets of different thicknesses.

#### **AC waveforms**

Optimum stability and reduced noise level thanks to adjustable AC waveforms (sine, trapezoidal, square and customised).

#### **AC frequency**

Adjustment of the arc force – ideal for thin metal sheets and fillet welds.

#### **AC balance**

Perfect harmonization between the penetration profile and the achievable cleaning effect.

### MMA +

#### **Pulsing**

Vertical-up welding without using the “Christmas tree” technique, but still with reliable root fusion.

#### **Cel**

100% reliable vertical-down welding with all cellulose electrodes.



# XQ

TETRIX

## EVERYTHING, JUST AS YOU LIKE IT.

TETRIX XQ 230 DC | TETRIX XQ 230 AC/DC.

TETRIX XQ 300 DC | TETRIX XQ 300 AC/DC.

DC or AC/DC? With or without cooling unit, construction site trolley or workshop trolley?  
We provide you with exactly the right TETRIX XQ you need for your welding tasks.

TETRIX XQ DC +



TETRIX XQ AC/DC +

WITH COOL XQ +



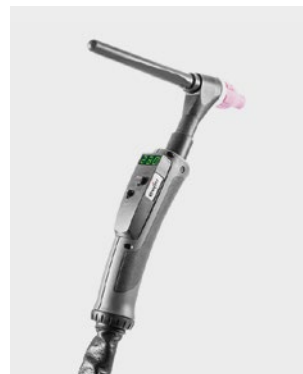
ACCESSORIES +



WORKSHOP TROLLEY



CONSTRUCTION SITE TROLLEY



WELDING TORCH



# 5<sup>☆</sup>

DIRECT SELECTION OF YOUR WELDING TASK WITH FIVE INDIVIDUALLY PROGRAMMABLE FAVOURITES BUTTONS!

# 100

PERCENT

**BETTER OVERVIEW!**

Thanks to the well-laid-out, intuitively operated controls.

# 50%\*

LESS WORK REQUIRED FOR REPETITIVE TACK WELDING – WITH SPOTMATIC.

\*up to

# 100%

DIGITISATION FOR 100% REPRODUCIBLE WELDING RESULTS.

# 4

**A VARIETY OF PULSE VERSIONS ARE AVAILABLE:**

- Average value pulsing
- Thermal pulsing
- Automatic pulsing
- AC special pulsing

# 3 YEAR WARRANTY\*\*

- No restriction on the number of operating hours – even when used in 3-shift operation, 24 hours a day, 7 days a week
- 3-year warranty on welding machines and 5-year warranty on transformers and rectifiers

\*\*In accordance with the warranty conditions at [www.ewm-group.com](http://www.ewm-group.com)

# IT MAKES YOU EVEN BETTER.

TETRIX XQ HAS ALL YOU NEED TO MAKE YOUR WELDING PERFECT.

Because we've been continually developing the series in line with your needs. Decades of experience and countless discussions with welding professionals have also led to what you see before you: the new TETRIX XQ. Experience the new way to weld.





REIMAGINED, DOWN TO THE  
SMALLEST DETAIL.  
MAKING EVERY WELDING TASK FUN.



**EVERYTHING  
WITHIN REACH.**



You can stow consumables in the storage compartment on the newly designed handle and always have them ready-to-go.



**FULLY  
CONNECTABLE.**



Your Tetrix XQ is outfitted with an interface for remote controls as standard. There's also a 7-pole digital interface for your ewm Xnet welding management software.



**ALWAYS IN SIGHT.**



The large LED infobar with four unambiguous signal colours always shows you the current operating status of your TETRIX XQ.





## PROTECTED CONTROL.



The protective cap protects against water, dirt and impact. The machine can still be operated if the cap is closed.



## FLEXIBLE CONNECTION.



The standard 5-pole torch connection is now compatible with EWM X technology. This allows you to connect digital EWM multi-function torches with display and remote-control functions, in addition to conventional welding torches.



## PROTECTED CONNECTIONS.



To protect against damage, all connections are recessed into the casing, yet still conveniently accessible.



# TIG XQ SERIES.

IT'S BEGINNING: YOUR ALL-NEW TIG WELDING EXPERIENCE

Tetrix XQ puls AC/DC

230 A, 300 A



CASING

## MODULAR

### AC/DC WELDING FUNCTIONS

TIG AND MMA WELDING FUNCTIONS

- AC amplitude balance
- AC balance
- AC-Balling
- AC frequency
- AC special
- AC waveforms
- Standard AC
- Pulsed TIG AC welding

- activArc®
- Automatic pulsing
- HF start
- Lift arc
- Average value pulse welding
- spotArc®
- spotmatic
- Standard DC
- Thermal pulsing
- TIG Antistick
- Pulsed TIG DC welding

- Antistick
- Arcforce
- Cellulose electrode compatible
- MMA pulse welding
- Hot start
- Standard MMA

CONTROL



Comfort 3.0 AC



Expert 3.0

OVERVIEW OF WELDING FUNCTIONS



#### AC amplitude balance

Allows adjustment of negative and positive welding current level.



#### AC balance

The perfect balance between the penetration profile and the achievable cleaning effect.



#### AC-Balling

Ensures optimum tungsten balling and therefore a stable, easy-to-handle arc.



#### AC frequency

Adjustment of arc – ideal for thin sheets and fillet welds.



#### AC waveforms

Optimum stability and reduced noise level thanks to adjustable AC waveforms (sine, trapezoidal, square and customised).



#### AC special

Switch between AC in the pulsing phase and DC in the fundamental current phase.



#### activArc®

Dynamic TIG arc with automatic arc stabilisation.



#### Automatic pulsing

In order to increase arc stability and penetration characteristics at low currents, the current is automatically pulsed.



#### HF start

Prevents tungsten non-contact arc ignition.



#### Lift arc

Simple ignition of the welding torch on the workpiece.



#### Average value pulse welding

Allows the user to meet the WPS requirement in pulsed mode.



#### spotArc®

Minimised time required due to individual settings with the torch trigger.



## Tetrix XQ puls DC

230 A, 300 A



### MODULAR

### DC WELDING FUNCTIONS

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>activArc<sup>®</sup></li> <li>Automatic pulsing</li> <li>HF start</li> <li>Lift arc</li> <li>Average value pulse welding</li> <li>spotArc<sup>®</sup></li> <li>spotmatic</li> <li>Standard DC</li> <li>Thermal pulsing</li> <li>TIG Antistick</li> <li>Pulsed TIG DC welding</li> </ul> | <ul style="list-style-type: none"> <li>Antistick</li> <li>Arcforce</li> <li>Cellulose electrode compatible</li> <li>MMA pulse welding</li> <li>Hot start</li> <li>Standard MMA</li> </ul> |
|--|---|



Comfort 3.0 DC



Expert 3.0

inclusions through  
ignition.

the arc without HF by pulling  
torch electrode after touching

#### Use welding

to implement, for example,  
is extremely easily, even in

required for tacking and spot weld-  
ing. The manual triggering of the tack points  
is easier.



#### spotmatic

Reproducible welding of uniform tack points.



#### Standard AC

Aluminium welding in just one click thanks to perfect  
presets. Easy adjustment of AC parameters for special  
applications.



#### Standard DC

Perfect TIG welding with ignition parameters adapted  
depending on power output.



#### Thermal pulsing

The freely adjustable pulsed current and relevant  
time can be adapted in accordance with  
the welding power. These precision settings  
allow for unique weld appearances.



#### TIG Antistick

Prevents damage to tungsten electrode  
in case of inadvertent contact with the  
workpiece.



#### Pulsed TIG AC welding

Reduced distortion and discolouration  
through energy per unit length and heat  
input.



#### Pulsed TIG DC welding

Reduces heat input and therefore  
distortion and discolouration.

Xnet ready

Blue Evolution<sup>®</sup>

3 Years // 5 Years  
ewm-warranty  
3 shifts / 24 hours / 7 days

Industry 4.0  
ewm



# NOW IT'S GETTING PERSONAL.

THE BEST CONTROLS FOR YOUR BEST WELDING.

Perfect welding starts with the right settings. With the new controls of the TETRIX XQ, you have every option available for individualised work at the highest level, whether you're using the tried-and-tested COMFORT 3.0 or the new EXPERT 3.0. To enable you to use our controls smoothly while wearing welder's gloves, they're not operated via touchscreen, but instead with the ergonomic click wheel and, of course, with an easy-to-understand menu in your language. TETRIX XQ – not just anyone's, yours.



Expert  
**3.0**



## EXPERT 3.0 +

### NOW ANYTHING'S POSSIBLE.

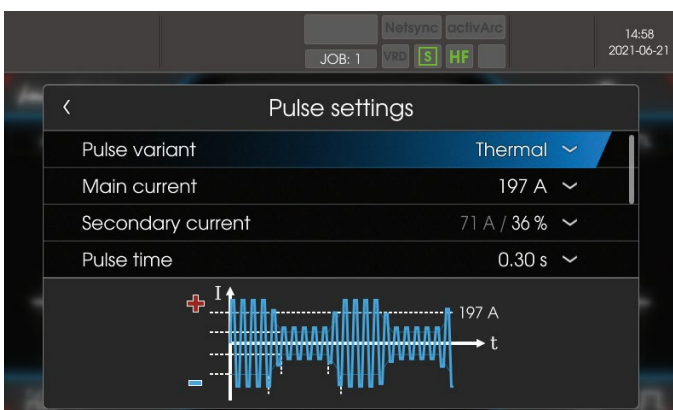
- 7" high-resolution graphic display with plain text display
- 5 favourites buttons
- Xbutton for individual access authorisation
- USB interface for offline documentation and software updates
- Click wheel for convenient operation with welder's gloves
- Reliable push-button operation (no touchscreen)
- Customisable to your individual requirements
- Direct access to all main functions
- All parameters at a glance
- Colour screen and graphical support for setting parameters



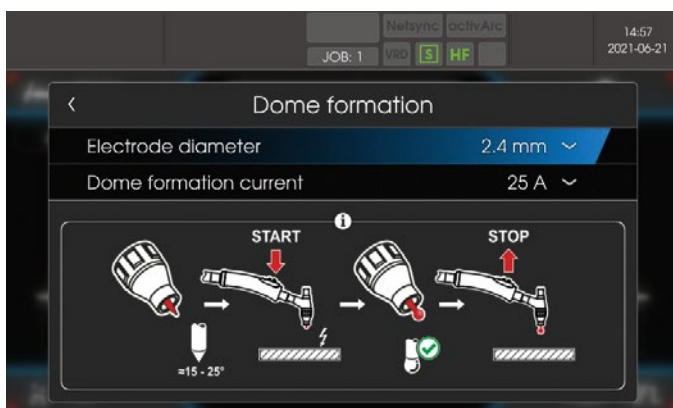
**Graphic adjustment of all parameters in the flow diagram**



**Visual support for parameter setting**



All key functions can be accessed without submenus directly from the home screen



Easy-to-understand illustrated instructions and quick-access menus

**FUTURE SOFTWARE UPDATES FOR EXPERT 3.0 ARE AVAILABLE FOR DOWNLOAD.**

## COMFORT 3.0 +

POPULAR, PRAISED AND SIMPLY INDISPENSABLE.

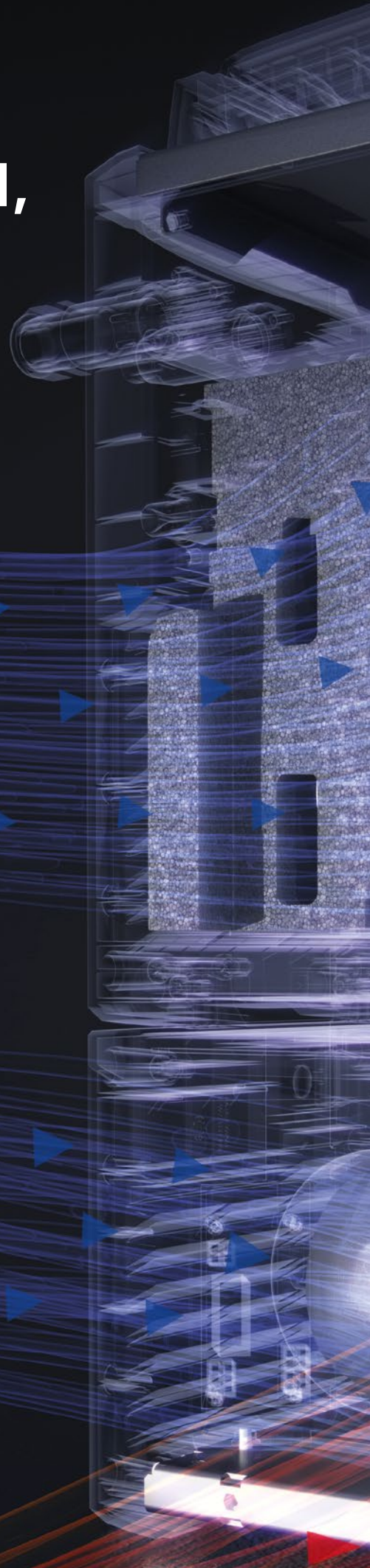
- 2 large, easy-to-read 7-segment displays
- 5 favourites buttons
- Click wheel for convenient use with welder's gloves
- Reliable push-button operation
- Direct access to all main functions
- All parameters at a glance
- AC and DC versions available



# STAY COOL AND CLEAN, ALL THE TIME.

THE NEW COOLING SYSTEM AND AIR  
DUCTING OF THE TETRIX XQ ENSURE TOP  
PERFORMANCE.

To keep your welding torch well cooled even under the heaviest loads, we developed the new COOL XQ cooling system. With excellent cooling capacity and integrated flow and temperature monitoring, it's the perfect addition to your new TETRIX XQ. For those times when it takes a while. Air ducting of the TETRIX XQ operates in a targeted way, so only those parts which really need to be cooled are cooled. The sophisticated design minimises contamination, even in rough environments.





IT'S SO COOL.  
AND UPGRADABLE, ANYTIME.



**PERFECTLY  
POSITIONED  
CONNECTIONS.**

The power and control connections are located on the top of the cooler, so it connects perfectly to the TETRIS XQ.



**DUST FILTERS.  
NOTHING GETS  
THROUGH.**

The reusable stainless steel dust filter can be mounted without tools. It fits both your Cool XQ and your TETRIS XQ.



**HIGHLY STURDY.**



The machine's rugged feet are perfectly suited for use in rough environmental conditions.





**A COOL WELDING TORCH, ALL THE TIME.** +

When using high welding currents, your Cool XQ with liquid cooling reliably keeps your handy RETOX XQ welding torch cool.



**SECURE WATER CONNECTION.** +

The water connections are recessed and optimally protected against damage.



**FILLING LEVEL INDICATOR AND INSTRUCTIONS IN PLAIN SIGHT.** +

You can easily check the filling level of the coolant from the indicator on the front, right next to the operating information.



# DIGITISE ANY WELDING OPERATION.

## THE ewm Xnet WELDING MANAGEMENT SYSTEM AND XBUTTON.

### BETTER OUTPUT FOR LESS MONEY? IMPOSSIBLE? OR NOT!

ewm Xnet digitises your welding operations, making it the perfect addition to your new TETRIX XQ. This future-oriented welding management system organises production, planning, quality management, welding coordination personnel and administration. In this way, it decisively helps you improve efficiency, quality and documentation. This is Welding 4.0 – and our answer to Industry 4.0.

### SIMPLY BE MORE PRODUCTIVE. +

With ewm Xnet, you get more done in the same amount of time. Paperless transfer of all relevant data directly to the workplace, fewer error corrections thanks to specified welding parameters and less unnecessary downtime thanks to timely maintenance notices simply allow you to work more efficiently.

### XBUTTON – SMALL BUTTON. BIG EFFECT. +

The Xbutton makes your TETRIX XQ even more reliable and a bit more “you”. You can easily transfer all the parameters from your personal welding plan and your specific menu settings to the machine.



**Xnet ready**





# YOUR NEW TETRIX XQ CAN HANDLE IT.

## WELDING PROCESSES AND FUNCTIONS FOR OPTIMUM WELDING RESULTS



	DC	AC/DC
<b>Welding procedures</b>	TIG MMA	TIG MMA
<b>TIG functions</b>	activArc Pulsing <ul style="list-style-type: none"> <li>• Average value pulsing</li> <li>• Thermal pulsing</li> <li>• Automatic pulsing</li> </ul> HF start/lift arc spotArc/spotmatic (tack welding)	activArc Pulsing <ul style="list-style-type: none"> <li>• Average value pulsing</li> <li>• Thermal pulsing</li> <li>• Automatic pulsing</li> </ul> HF start/lift arc spotArc/spotmatic (tack welding) AC frequency AC balance AC waveforms AC special AC balling (tungsten balling)
<b>MMA functions</b>	Pulsing Hot start Arcforce Antistick Cel	Pulsing Hot start Arcforce Antistick Cel

### TIG +

#### activArc

Dynamic TIG arc with automatic arc stabilisation. The high arc force provides reliable sidewall fusion as well as focused and uniform heat input. Particularly beneficial when welding fillet welds and root passes.

#### Pulsing

Decreases the heat input, which reduces distortion and discolouration.

#### HF start

Prevents tungsten inclusions through non-contact arc ignition.

#### Lift arc

Simple ignition of the arc without HF by pulling up the welding torch electrode after touching the workpiece.

#### spotArc

Minimised spot and tacking times thanks to individual triggering of the tack points with the torch trigger.

#### Spotmatic

Reproducible welding of uniform tack points.

#### AC frequency

Adjustment of the arc force – perfect for thin metal sheets and fillet welds.

#### AC balance

Perfect harmonization between the penetration profile and the achievable cleaning effect.

#### AC waveforms

Optimum stability and reduced noise level thanks to adjustable AC waveforms (sine, trapezoidal, square and customised).

#### AC special

Ideal for joining metal sheets of different thicknesses together.

#### AC balling

Ensures optimum tungsten balling and therefore a stable, easy-to-handle arc.

### MMA +

#### Pulsing

Vertical-up welding without using the “Christmas tree” technique, but still with reliable root fusion.

#### Hot start

Prevents a lack of fusion at the start of the weld seam by briefly increasing the current when welding begins.

#### Arcforce

Arc dynamics can be adjusted from soft to hard.

#### Antistick

Prevents the electrode from annealing by briefly switching off the welding current.

#### Cel

100% reliable vertical-down welding with all cellulose electrodes.


# TECHNICAL DATA



## TETRIX XQ

## 230 PULS DC

## 230 PULS AC/DC

TIG Setting range for welding current	3 A – 230 A	2 A – 230 A
MMA Setting range for welding current	5 A – 190 A	5 A – 190 A
TIG Welding current/duty cycle at 40 °C	230 A / 45 % 205 A / 60 % 170 A / 100 %	230 A / 40 % 200 A / 60 % 170 A / 100 %
MMA Welding current/duty cycle at 40 °C	190 A / 35 % 155 A / 60 % 125 A / 100 %	190 A / 35 % 150 A / 60 % 120 A / 100 %
Open circuit voltage	96 V*	
Mains voltage/tolerance	1 x 230 V (- 40 % – + 15 %)	
Mains fuse	1 x 16 A	
Rec. generator rating	8,2 kVA	8,8 kVA
cos $\varphi$ /efficiency	0,99 / 87 %	0,99 / 83 %
Insulation class/protection classification	H / IP23	
Ambient temperature	-25 °C to +40 °C	
Machine cooling	Fan, temperature-controlled	
Torch connection	5- or 8-pole	
Mains connection lead	3.5 m	
Display size	Expert 3.0: 7" display (not a touchscreen) Comfort 3.0: 7-segment LED	
Favourites buttons	5	
Safety identification		
Harmonised standards used	IEC 60974-1, -3, -10 CLA	
Dimensions (L x W x H) mm	550 x 224 x 415	
Dimensions (L x W x H) inch	21.7 x 8.8 x 16.3	
Weight kg	17.5	
Weight lbs	38.6	

\*VRD versions available as a separate machine.

## TECHNICAL DATA



### TETRIX XQ

### 300 PULS DC

### 300 PULS AC/DC

TIG Setting range for welding current	3 A – 300 A	
MMA Setting range for welding current	5 A – 300 A	
TIG Welding current/duty cycle at 40 °C	300 A / 40 % 270 A / 60 % 220 A / 100 %	
MMA Welding current/duty cycle at 40 °C	300 A / 30 % 260 A / 60 % 210 A / 100 %	
Open circuit voltage	87 V*	
Mains voltage/tolerance	3 x 380 - 400 V (-25 % to +20 %)	
Mains fuse	1 x 16 A	
Rec. generator rating	22,3 kVA	23,4 kVA
cos φ/efficiency	0.99 / 87 %	0.99 / 83 %
Insulation class/protection classification	H / IP23	
Ambient temperature	-25 °C to +40 °C	
Machine cooling	Fan, temperature-controlled	
Torch connection	5- or 8-pole	
Mains connection lead	5.5 m	
Display size	Expert 3.0: 7" display (not a touchscreen) Comfort 3.0: 7-segment LED	
Favourites buttons	5	
Safety identification		
Harmonised standards used	IEC 60974-1, -3, -10 CLA	
Dimensions (L x W x H) mm	550 x 224 x 415	
Dimensions (L x W x H) inch	21.7 x 8.8 x 16.3	
Weight kg	20.5	22.0
Weight lbs	45.2	48.5

\*VRD versions available as a separate machine.



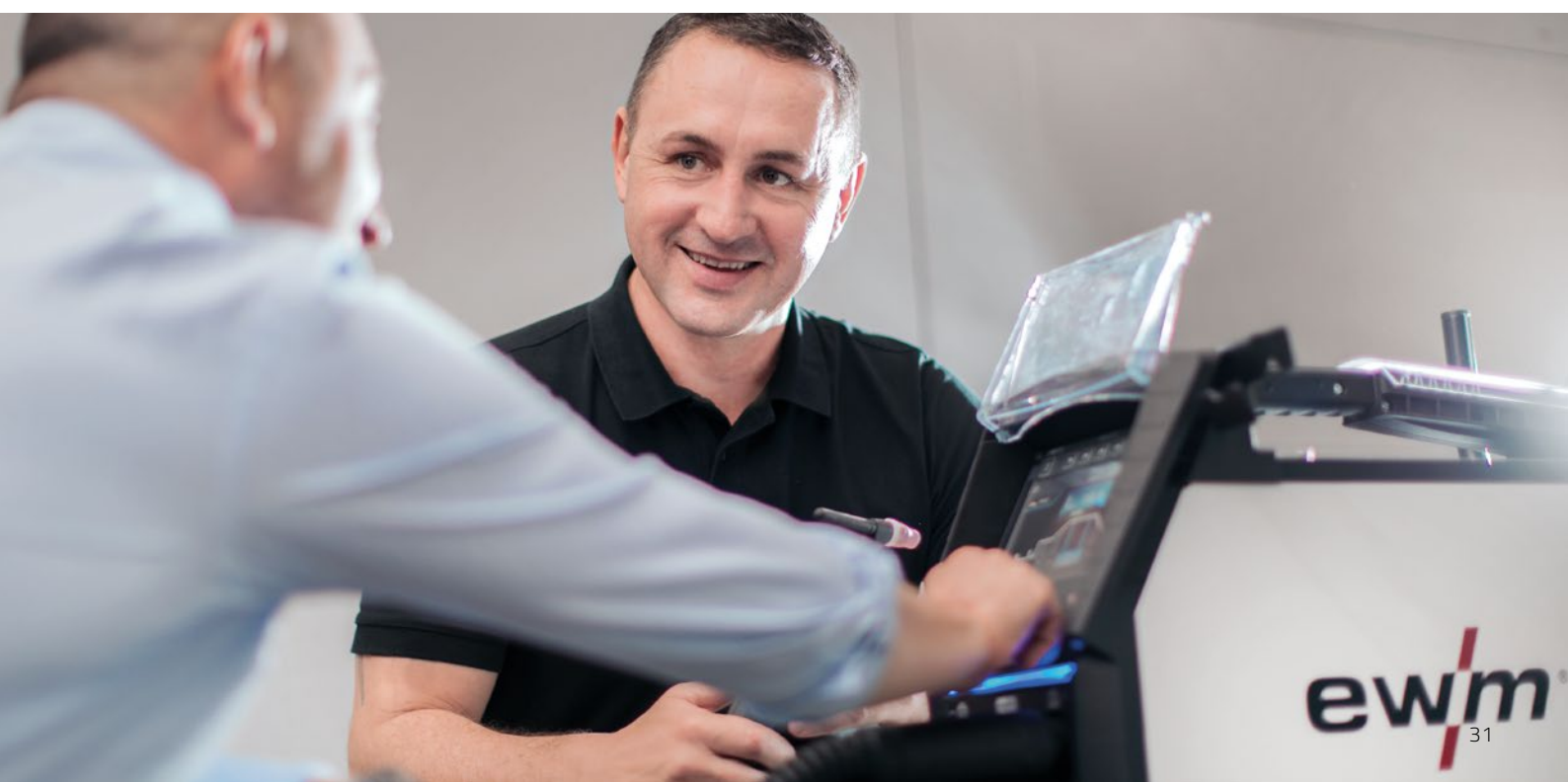
COOL XQ 40



COOL XQ 41-1

Compatible with	Tetrix XQ 230	Tetrix XQ 300
Input voltage	230 V	400 V
Max. cooling capacity	1.100 W	
Cooling capacity at 1 l/min	790 W	
Max. delivery height	35 m	
Max. pump pressure	3,5 bar	
Pump	Centrifugal pump	
Machine cooling	Fan, temperature-controlled	
Protection classification	IP 23	
Safety identification	CE ENEC UKA	
Harmonised standards used	IEC 60974-1, -2, -10 CLA	
Standard configuration	Flow monitor, Temperature controller	
Dimensions (L x W x H) mm	588 x 224 x 200	
Dimensions (L x W x H) inch	23.1 x 8.8 x 7.9	
Weight (without coolant) kg	10,4	
Weight (without coolant) lbs	22.9	

WELDING WITH EWM MEANS:  
WE'RE HERE FOR YOU!





WE ARE WELDING

EWM GmbH  
Dr. Günter-Henle-Straße 8  
56271 Mündersbach  
Germany  
Phone: +49 2680 181-0  
Fax: +49 2680 181-244  
E-mail: info@ewm-group.com



## #WEAREWELDING

Follow us



EWM is your partner for the best welding technology. With EWM, you'll weld more efficiently, more reliably and produce higher-quality results. EWM's innovative systems, high-performance welding procedures, digital technologies and services, and expert consultation all support you in achieving perfect results from your welding tasks.



[www.ewm-group.com/en/](http://www.ewm-group.com/en/)

The content of this document has been researched, prepared and reviewed with all reasonable care. The information provided is subject to change; errors excepted.