




SET-UP AND MAINTENANCE GUIDE

ARCT SERIES

INTELLIGENT
TORCH SOLUTIONS

 EN English Quick Guide
 DA Danish Kvik Guide
 DE German Kurzanleitung

 IT Italian Guida rapida
 NL Dutch Verkorte handleiding

Contents

Ratings at a Glance	1
Getting Started	2
Set-Up Overview	7



[View Full Product Catalogue](#)



[View Auto Tig Product Catalogue](#)

RATINGS AT A GLANCE

IEC/EN 60974-7



MAKE WORK
LIFE EASIER

Air-Cooled

Technical Data:		T1A/CWT1A Auto	T3A/CWT3A Auto
Cooling Method		Air-Cooled	
Rating:	DC	140A	240A
	AC	100A	170A
Duty Cycle		60%	60%
Electrode Size		1.0-3.2mm / 0.04"-1/8"	1.0-4.8mm / 0.04"-3/16"
Operating Temperature		-20°C ...+40°C	

Liquid-Cooled

Technical Data:		T1WA/CWT1WA Auto		T3WA/CWT3WA Auto		T5WA/CWT5WA Auto		
Cooling Method		Liquid-Cooled						
		12.5ft	25ft	12.5ft	25ft	12.5ft	25ft	
Rating:	1200W	DC	330A	330A	400A	400A	550A	450A
		AC	230A	230A	280A	280A	385A	315A
	1600W	DC	-	-	-	-	550A	450A
		AC	-	-	-	-	385A	315A
Duty Cycle		100%	100%	100%	100%	100%	100%	
Electrode Size		1.0-4.0mm / 0.04"-5/32"		1.0-4.0mm / 0.04"-5/32"		1.6-6.4mm / 1/16"-1/4"		
Minimum Water Flow		1.5 l/min		1.5 l/min		1.5 l/min		
Minimum Water Inlet Pressure		2.5 Bar						
Maximum Water Inlet Pressure		5.0 Bar						
Maximum Water Inlet Temperature		50°C						
Operating Temperature		-20°C ...+40°C						

Technical Data

DA Tekniske DE Technische Daten
IT Dati Tecnici NL Technische Gegevens

Rating

DA Ydelse DE Belastungsdaten
IT Amperaggio NL Lasstroem

Duty Cycle

DA Intermittens DE Einschaltdauer
IT Ciclo di lavoro NL Inschakelduur

Electrode Size

DA Elektrodediameter DE Elektroden Durchmesser
IT Diametro Elettrodo NL Electrode Diameter

Air-Cooled

DA Gaskolet DE Luftgekuehlt
IT Raffreddato Ad Aria NL Luchtgekoeld

Liquid-Cooled

DA Vandkolet DE Wassergekuehlt
IT Raffreddato Ad Acqua NL Watergekoeld

Minimum Water Flow

DA Min. Fowrate (vand) DE Minimaler Wasserdurchfluss
IT Flusso Acqua Minimo NL Minimale Water Flow

Minimum Water Inlet Pressure

DA Min. Tryk (vand) DE Minimaler Wassereingangsdruck
IT Pressione Minima Ingresso Acqua
NL Minimale Waterdruk

Maximum Water Inlet Pressure

DA Maks. Tryk (vand) DE Maximaler Wassereingangsdruck
IT Pressione Massima Ingresso Acqua
NL Maximale Waterdruk

Maximum Water Inlet Temperature

DA Maks. Vandtemperatuer DE Maximale Wassereintrittstemperatur
IT Temperatura Massima Ingresso Acqua
NL Maximale Watertemperatuer

- ✓ IEC/EN 60974-7
- ✓ ISO9001:2015
- ✓ LVD 2014/35/EU
- ✓ REACH 1907/2006/EC
- ✓ RoHS2 2011/65/EU, amend 2015/863/EU

GETTING STARTED

Auto Standard Set-Up



MAKE WORK
LIFE EASIER

- 1** Ensure you have all the parts



Kontroller at alle dele er til stede



Stellen Sie sicher, dass alle Teile vorhanden sind



Assicurarsi di avere tutti i ricambi



Controleer of alle benodigde onderdelen aanwezig zijn

- 2** Push the gasket onto the head
Twist and push the gasket until in place



Monter pakningen på brænderhovedet.
Drej og skub pakningen indtil den er på plads



Schieben Sie die Dichtung auf den Brennerkopf. Hinweis
Drehen und drücken Sie die Dichtung bis zum Anschlag.



Spingere la guarnizione sul corpo torcia
Ruotare e spingere finché la guarnizione è in sede



Druk de isolatie op de toortskop.
draai en duw de isolatie tot deze vast zit

- 3** Assemble the heat isolator.
Tighten with the enclosed spanner



Monter isolatoren. Benyt vedlagte fastnøgle for tilspænding



Montieren Sie den Wärmeisolator. Mit dem beiliegenden
Schlüssel festziehen.



Montare l'isolante. Fissare con la chiave in dotazione



Bevestig de hitte isolator, draai deze goed vast met de
bijgeleverde spanner

- 4** Insert the collet and locate the collet slot on the
pin at the back of the head



Indsæt spændbøsningen i brænderhovedet



Führen Sie die Spannzange so ein, das die Nut in den
Führungsstift im Brennerkopf passt.



Collocare il serra elettrodo sul corpo torcia







Steek de spanmoer in de toortskop en draai deze tot
deze in de pinsluiting valt

GETTING STARTED





5 Assemble the back cap to pinch the collet



-  Monter baghætten således at spændbøsning er fast
-  Montieren Sie die Brennerkappe, um die Spannzange zu klemmen
-  Ruotare la penna per bloccare il serra elettrodo
-  Draai de toortskap op de spanmoer





6 Insert the tungsten



-  Indsæt Wolframelektroden
-  und spannen Sie mit der Brennerkappe fest.
-  Inserire l'elettrodo in tungsteno
-  Plaats de elektrode





7 Assemble the ceramic - push on



-  Monter den keramiske push-on gasdyse
-  Montieren Sie die Gasdüse - einfach auf stecken.
-  Montare la ceramica - spingere
-  Bevestig de keramische cup, druk deze aan

8 Tighten the back cap. You're ready to go!



-  Spænd baghætten - Du er klar !
-  Schrauben Sie die Brennerkappe fest. Fertig zum gebrauch!
-  Serrare la penna. Sei pronto per partire!
-  Draai de toortskap vast om de elektrode te spannen. u bent klaar om te lassen!

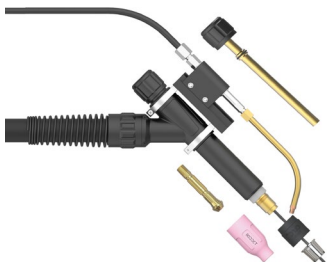
GETTING STARTED





Auto Cold-Wire Set-Up



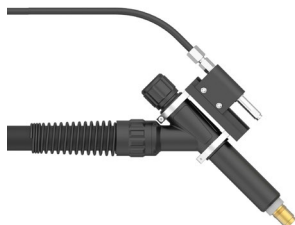
MAKE WORK
LIFE EASIER





1 Ensure you have all the parts



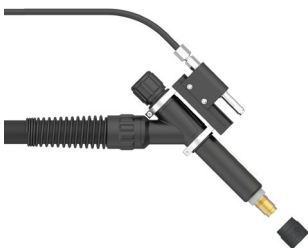
-  Kontroller at alle dele er til stede
-  Stellen Sie sicher, dass alle Teile vorhanden sind
-  Assicurarsi di avere tutti i ricambi
-  Controleer of alle benodigde onderdelen aanwezig zijn





2 Remove the cold-wire neck assembly



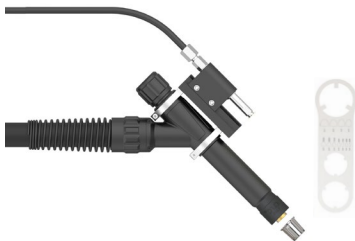
-  Fjern den kolde-tråds halsmontering
-  Entfernen Sie das kalte Drahtzufuhrsystem
-  Rimuovere l'assemblaggio del collo a filo freddo
-  Verwijder het koude-draadaanvoer systeem





3 Push the gasket onto the head
Twist and push the gasket until in place



-  Monter pakningen på brænderhovedet.
Drej og skub pakningen indtil den er på plads
-  Schieben Sie die Dichtung auf den Brennerkopf. Hinweis
Drehen und drücken Sie die Dichtung bis zum Anschlag.
-  Spingere la guarnizione sul corpo torcia
Ruotare e spingere finché la guarnizione è in sede
-  Druk de isolatiering op de toortskep.
draai en duw de isolatiering tot deze vast zit

4 Assemble the heat isolator.
Tighten with the enclosed spanner



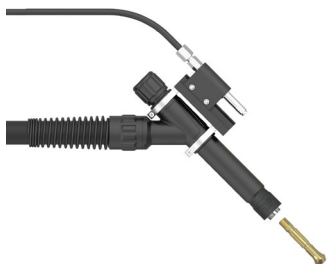
-  Monter isolatoren. Benyt vedlagte fastnøgle for tilspænding
-  Montieren Sie den Wärmeisolator. Mit dem beiliegenden
Schlüssel festziehen.
-  Montare l'isolante. Fissare con la chiave in dotazione
-  Bevestig de hitte isolator, draai deze goed vast met de
bijgeleverde spanner

GETTING STARTED



MAKE WORK
LIFE EASIER

5 Insert the collet and locate the collet slot on the pin at the back of the head



Indsæt spændbøsningen i brænderhovedet



Führen Sie die Spannzange so ein, das die Nut in den Führungsstift im Brennerkopf passt.

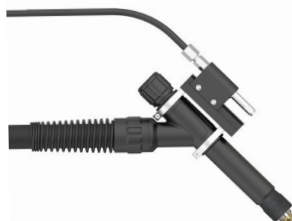


Collocare il serra elettrodo sul corpo torcia



Steek de spanmoer in de toortsbody en draai deze tot deze in de pinsluiting valt

6 Assemble the back cap to pinch the collet



Monter baghætten således at spændbøsning er fast



Montieren Sie die Brennerkappe, um die Spannzange zu klemmen



Ruotare la penna per bloccare il serra elettrodo



Draai de toortskap op de spanmoer

7 Insert the tungsten



Indsæt Wolframelektroden



Schieben Sie die Elektrode in die Spannmutter

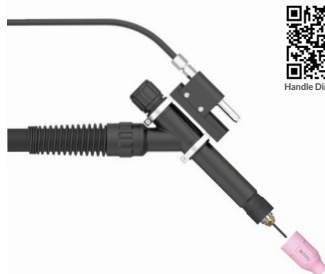


Inserire l'elettrodo in tungsteno



Schuif de elektrode in de spanmoer

8 Assemble the ceramic - push on



Monter den keramiske push-on gasdyse



Montieren Sie die Gasdüse - einfach auf stecken.



Montare la ceramica - spingere



Bevestig de keramische cup, druk deze aan

GETTING STARTED

Auto Cold-Wire Set-Up



MAKE WORK
LIFE EASIER

9 Tighten the back cap



Stram bagkappen



Ziehen Sie die hintere Kappe fest

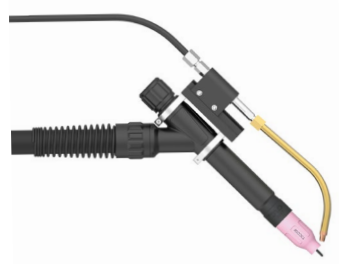


Serrare il tappo posteriore



Draai de achterkap vast

10 Install the cold-wire neck assembly



Installér koldtråds-halsenheden



Montieren Sie das kalte Drahtzufuhrsystem

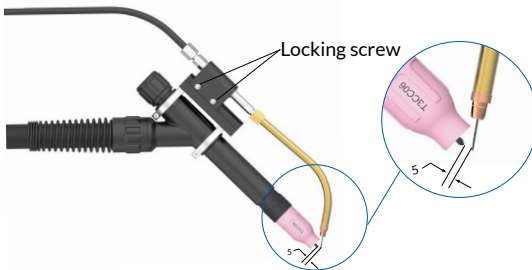


Installare la curva assemblata per il filo freddo



Monteer het koude-draadaanvoer systeem

11 Feeding welding wire, adjust the distance and tighten the locking screw



Føder svejsningstråd, justerer afstanden og strammer låseskruen



Schweißdraht zuführen, den Abstand einstellen und die Feststellschraube



Alimentare il filo di saldatura, regolare la distanza e serrare la vite di bloccaggio



Lasdraad voeden, de afstand aanpassen en de vergrendelingschroef aandraaien

ARC TIG WEAR PARTS SET-UP OVERVIEW



MAKE WORK
LIFE EASIER

T1A/T1WA CWT1A/CWT1WA Series



Standard Nozzle Collet Body Set-Up

Recommended Set-up Parameters for Steel and Aluminium

Nozzle Size	Bore Size	Suggested Gas Flow Rate	Maximum Tungsten Stick-out	Ceramic Nozzle	Tungsten Size							
					1.0	1.6	2.4	3.2	4.0	4.8	6.4	
4	6mm 1/4"	6 l/min	8mm	●	●	●	●	●	●	●	●	●
5	8mm 5/16"	6 l/min	8mm	●	●	●	●	●	●	●	●	●
6	10mm 3/8"	7 l/min	10mm	●	●	●	●	●	●	●	●	●
7	11mm 7/16"	8 l/min	10mm	●	●	●	●	●	●	●	●	●
8	12mm 1/2"	8 l/min	10mm	●	●	●	●	●	●	●	●	●
10	15mm 5/8"	10 l/min	13mm	●	●	●	●	●	●	●	●	●

Note: Maximum recommended tungsten for Quartz option is 3.2mm.
Quartz cups can be used for Aluminium welding but only in short runs

Standard Nozzle Gas Lens Collet Body Set-Up

Recommended Set-up Parameters for Steel and Aluminium

Nozzle Size	Bore Size	Suggested Gas Flow Rate	Maximum Tungsten Stick-out	Ceramic Nozzle	Tungsten Size							
					1.0	1.6	2.4	3.2	4.0	4.8	6.4	
4	6mm 1/4"	5 l/min	10mm	●	●	●	●	●	●	●	●	●
5	8mm 5/16"	6 l/min	10mm	●	●	●	●	●	●	●	●	●
6	10mm 3/8"	7 l/min	13mm	●	●	●	●	●	●	●	●	●
7	11mm 7/16"	8 l/min	14mm	●	●	●	●	●	●	●	●	●
8	12mm 1/2"	8 l/min	15mm	●	●	●	●	●	●	●	●	●
10	15mm 5/8"	10 l/min	15mm	●	●	●	●	●	●	●	●	●

Note: Maximum recommended tungsten for Quartz option is 3.2mm.
Quartz cups can be used for Aluminium welding but only in short runs



Short Nozzle Collet Body Set-Up

Recommended Set-up Parameters for Steel and Aluminium

Nozzle Size	Bore Size	Suggested Gas Flow Rate	Maximum Tungsten Stick-out	Ceramic Nozzle	Tungsten Size							
					1.0	1.6	2.4	3.2	4.0	4.8	6.4	
5	8mm 5/16"	6 l/min	8mm	●	●	●	●	●	●	●	●	●
7	11mm 7/16"	8 l/min	8mm	●	●	●	●	●	●	●	●	●
10	15mm 5/8"	10 l/min	10mm	●	●	●	●	●	●	●	●	●



Short Nozzle Gas Lens Collet Body Set-Up

Recommended Set-up Parameters for Steel, Aluminium and Stainless Steel

Nozzle Size	Bore Size	Suggested Gas Flow Rate	Maximum Tungsten Stick-out	Ceramic Nozzle	Tungsten Size							
					1.0	1.6	2.4	3.2	4.0	4.8	6.4	
5	8mm 5/16"	6 l/min	8mm	●	●	●	●	●	●	●	●	●
7	11mm 7/16"	8 l/min	8mm	●	●	●	●	●	●	●	●	●
10	15mm 5/8"	10 l/min	10mm	●	●	●	●	●	●	●	●	●



ARC TIG WEAR PARTS SET-UP OVERVIEW



MAKE WORK
LIFE EASIER

T3WA/CWT3WA



Standard Nozzle Collet Body Set-Up

Recommended Set-up Parameters for Steel and Aluminium

Nozzle Size	Bore Size	Suggested Gas Flow Rate	Maximum Tungsten Stick-out	Ceramic Nozzle	Tungsten Size						
					1.0	1.6	2.4	3.2	4.0	4.8	6.4
4	6mm 1/4"	6 l/min	10mm	●	●	●	●	●	●	●	●
5	8mm 5/16"	6 l/min	10mm	●	●	●	●	●	●	●	●
6	10mm 3/8"	7 l/min	11mm	●	●	●	●	●	●	●	●
7	11mm 7/16"	7 l/min	12mm	●	●	●	●	●	●	●	●
8	12mm 1/2"	10 l/min	13mm	●	●	●	●	●	●	●	●
10	15mm 5/8"	12 l/min	15mm	●	●	●	●	●	●	●	●

Note: Maximum recommended tungsten for Quartz option is 3.2mm.

Quartz cups can be used for Aluminium welding but only in short runs

Standard Nozzle Gas Lens Collet Body Set-Up

Recommended Set-up Parameters for Stainless Steel, Steel and Aluminium

Nozzle Size	Bore Size	Suggested Gas Flow Rate	Maximum Tungsten Stick-out	Ceramic Nozzle	Tungsten Size						
					1.0	1.6	2.4	3.2	4.0	4.8	6.4
4	6mm 1/4"	5 l/min	10mm	●	●	●	●	●	●	●	●
5	8mm 5/16"	6 l/min	10mm	●	●	●	●	●	●	●	●
6	10mm 3/8"	7 l/min	13mm	●	●	●	●	●	●	●	●
7	11mm 7/16"	7 l/min	14mm	●	●	●	●	●	●	●	●
8	12mm 1/2"	8 l/min	15mm	●	●	●	●	●	●	●	●
10	15mm 5/8"	10 l/min	20mm	●	●	●	●	●	●	●	●

Note: Maximum recommended tungsten for Quartz option is 3.2mm.

Quartz cups can be used for Aluminium welding but only in short runs

T3A /T5WA CWT3A /CWT5WA



Standard Nozzle Collet Body Set-Up

Recommended Set-up Parameters for Steel and Aluminium

Nozzle Size	Bore Size	Suggested Gas Flow Rate	Maximum Tungsten Stick-out	Ceramic Nozzle	Tungsten Size						
					1.0	1.6	2.4	3.2	4.0	4.8	6.4
4	6mm 1/4"	6 l/min	10mm	●	●	●	●	●	●	●	●
5	8mm 5/16"	6 l/min	10mm	●	●	●	●	●	●	●	●
6	10mm 3/8"	7 l/min	11mm	●	●	●	●	●	●	●	●
7	11mm 7/16"	7 l/min	12mm	●	●	●	●	●	●	●	●
8	12mm 1/2"	10 l/min	13mm	●	●	●	●	●	●	●	●
10	15mm 5/8"	12 l/min	15mm	●	●	●	●	●	●	●	●
12	19mm 3/4"	15 l/min	18mm	●	●	●	●	●	●	●	●

Note: Maximum recommended tungsten for Quartz option is 3.2mm.

Quartz cups can be used for Aluminium welding but only in short runs

ARC TIG WEAR PARTS SET-UP OVERVIEW



MAKE WORK
LIFE EASIER

T3A /T5WA CWT3A /CWT5WA



Standard Nozzle Gas Lens Collet Body Set-Up

Recommended Set-up Parameters for Stainless Steel, Steel and Aluminium

Nozzle Size	Bore Size	Suggested Gas Flow Rate	Maximum Tungsten Stick-out	Ceramic Nozzle	Tungsten Size							
					1.0	1.6	2.4	3.2	4.0	4.8	6.4	
4	6mm 1/4"	5 l/min	10mm	●	●	●	●	●	●	●	●	●
5	8mm 5/16"	6 l/min	10mm	●	●	●	●	●	●	●	●	●
6	10mm 3/8"	7 l/min	13mm	●	●	●	●	●	●	●	●	●
7	11mm 7/16"	7 l/min	14mm	●	●	●	●	●	●	●	●	●
8	12mm 1/2"	8 l/min	15mm	●	●	●	●	●	●	●	●	●
10	15mm 5/8"	10 l/min	20mm	●	●	●	●	●	●	●	●	●
12	19mm 3/4"	13 l/min	20mm	●	●	●	●	●	●	●	●	●

Note: Maximum recommended tungsten for Quartz option is 3.2mm.
Quartz cups can be used for Aluminium welding but only in short runs

T3A /T5WA CWT3A /CWT5WA



Large Gas Lens Nozzle With Large Gas Lens Collet Body Set-Up

Recommended Set-up Parameters for Stainless Steel, Steel and Aluminium

Nozzle Size	Bore Size	Suggested Gas Flow Rate	Maximum Tungsten Stick-out	Ceramic Nozzle	Tungsten Size							
					1.0	1.6	2.4	3.2	4.0	4.8	6.4	
8	12mm 1/2"	8 l/min	15mm	●	●	●	●	●	●	●	●	●
10	15mm 5/8"	10 l/min	20mm	●	●	●	●	●	●	●	●	●
12	19mm 3/4"	13 l/min	20mm	●	●	●	●	●	●	●	●	●
14	24mm 15/16"	15 l/min	25mm	●	●	●	●	●	●	●	●	●

Note: The Tungsten stick out should be minimum 10mm for Aluminium welding

ARC T HIGH PERFORMANCE SERIES

Make Work Life Easier

2025.04



MAKE WORK
LIFE EASIER